



TRANSALTA RENEWABLES INC.

ANNUAL INFORMATION FORM

FOR THE YEAR ENDED DECEMBER 31, 2019

February 28, 2020

# TABLE OF CONTENTS

PRESENTATION OF INFORMATION .....	3
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS .....	3
DOCUMENTS INCORPORATED BY REFERENCE .....	4
CORPORATE STRUCTURE .....	4
OVERVIEW .....	5
GENERAL DEVELOPMENT OF THE BUSINESS .....	6
BUSINESS OF TRANSALTA RENEWABLES .....	9
RISK FACTORS .....	31
EMPLOYEE AND GOVERNANCE MATTERS .....	42
CAPITAL AND LOAN STRUCTURE .....	47
CREDIT RATINGS .....	49
DIVIDENDS .....	49
MARKET FOR SECURITIES .....	51
DIRECTORS AND OFFICERS .....	51
ADDITIONAL INFORMATION REGARDING DIRECTORS AND OFFICERS .....	53
INTERESTS OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS .....	56
INDEBTEDNESS OF DIRECTORS, EXECUTIVE OFFICERS AND SENIOR OFFICERS .....	56
CEASE TRADE ORDERS, BANKRUPTCIES OR SANCTIONS .....	56
MATERIAL CONTRACTS .....	56
CONFLICTS OF INTEREST .....	57
LEGAL PROCEEDINGS AND REGULATORY ACTIONS .....	57
TRANSFER AGENT AND REGISTRAR .....	57
INTERESTS OF EXPERTS .....	57
ADDITIONAL INFORMATION .....	58
AUDIT AND NOMINATING COMMITTEE .....	58
APPENDIX "A" - AUDIT AND NOMINATING COMMITTEE CHARTER .....	61
APPENDIX "B" - GLOSSARY OF TERMS .....	67

## PRESENTATION OF INFORMATION

Unless otherwise noted, the information contained in this annual information form ("Annual Information Form" or "AIF") is given as at or for the year ended December 31, 2019. Unless the context otherwise requires, all references to the "Company" and to "TransAlta Renewables", "we", "our" and "us" herein refer to TransAlta Renewables Inc. and its subsidiaries on a consolidated basis and, when in reference to information prior to August 9, 2013, includes reference to TransAlta Corporation and its subsidiaries on a consolidated basis to the extent that such reference is in relation to the Initial Assets (as defined herein) that were acquired by TransAlta Renewables on August 9, 2013. Capitalized terms not defined in the body of this AIF shall have the respective specific meanings set forth in Appendix "B" hereto. References to "TransAlta" herein refer to TransAlta Corporation and its subsidiaries, other than the Company. In this AIF, references to "\$" or "dollars" are to Canadian dollars and all amounts in this AIF are stated in Canadian dollars unless otherwise indicated. TransAlta Renewables prepares its financial statements in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained in this Annual Information Form and the documents incorporated herein by reference constitute forward-looking statements within the meaning of applicable Canadian securities laws. These statements relate to future events or the Company's future performance or results. All statements other than statements of historical fact are forward-looking statements. The use of any of the words "anticipate", "plan", "contemplate", "continue", "estimate", "expect", "intend", "propose", "might", "may", "will", "shall", "project", "should", "could", "would", "believe", "predict", "forecast", "pursue", "potential" and "capable" and similar expressions are intended to identify forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause actual performance, results or events to differ materially from those anticipated in such forward-looking statements. No assurance can be given that these expectations will prove to be correct and such forward-looking statements included in this Annual Information Form should not be unduly relied upon. These statements speak only as of the date of this Annual Information Form. In addition, this Annual Information Form may contain forward-looking statements attributed to third-party industry sources.

In particular, this Annual Information Form (or a document incorporated by reference herein) contains forward-looking statements pertaining to the following: the forecasted business environment in Canada, Australia and the United States; spending on growth and sustaining capital and productivity projects, including sustaining capital expenditures of subsidiaries of TransAlta in which we have an economic interest; the benefits of the recent acquisition of an interest in two US renewable projects from TransAlta; our growth strategy, including the potential sale by TransAlta of certain of its contracted assets; consumer trends that appear to support moving toward more renewable and cleaner energy; outstanding debt levels; renewable energy production from our wind and hydro assets in 2020; expectations relating to the dividend reinvestment plan ("DRIP"), including TransAlta's intention to not participate in the DRIP; our foreign exchange risk strategy; expectations regarding net interest payments and volume of debt; expectations regarding project level debt; tax equity proceeds currently held as reserves being released upon the payment of all outstanding project costs and the satisfaction of certain other conditions, and a subsidiary of TransAlta repaying the remaining outstanding interest-bearing promissory notes to the Company; the subscription of additional tracking preferred shares to fund the remaining construction costs payable for Antrim and Big Level; statutory blended tax rates and our cash tax horizon; expectations in terms of the cost of operations and maintenance, including maintenance performed by third parties, and the variability of those costs; the payment of future dividends; expectations in respect of generation availability, capacity and production; actions to manage certain risks, including specific notions identified to manage liquidity risk, interest rate risk, project risks and reputation risk; expected governmental regulatory regimes, legislation and programs, including Canadian federal legislation pertaining to greenhouse gas emissions and the impact on the Corporation of recent regulatory developments in Ontario; the value of environmental attributes generated by our renewable facilities; expectations regarding the implementation of new IFRS standards; expectations regarding seasonality of wind and hydro production; expectations on our ability to access capital markets on reasonable terms; expectations regarding our decommissioning and restoration activities; and our expectations regarding the outcome of existing or potential legal or contractual claims, regulatory investigations and disputes, including the dispute with Fortescue Metals Group Ltd. ("FMG") over the commissioning of the South Hedland facility; that TransAlta will make available to the Corporation acquisition and growth opportunities from time to time to facilitate growth of the Company; that TransAlta will continue to provide the necessary management, administrative and operational services to the Company; and that the Company will continue to have access to natural gas, wind, solar and water resources in amounts consistent with the amounts expected by the Company and required to fulfill its obligations under its Power Purchase Arrangements ("PPAs").

With respect to forward-looking statements contained in this Annual Information Form and the documents incorporated by reference herein, assumptions have been made regarding, among other things, the matters referred to below: that the cost and availability of materials used in the construction of renewable energy facilities in the

jurisdictions in which the Company conducts and intends to conduct its business will remain consistent in all material respects with the current environment for the cost and availability of such materials; that the production from the Company's operating facilities will be consistent in all material respects with the Company's expectations; that there will be no material changes to existing legislation, including the regulatory framework governing electricity generation, transmission and distribution, taxation of renewable power producers, renewable power incentive programs or environmental matters that could adversely impact the renewable power sector as a whole or the applicable tariffs and incentives in any of the jurisdictions in which the Company conducts and will conduct its business; that there will be no material defaults by the counterparties to agreements with the Company and such agreements will not be terminated prior to their scheduled expiry; that TransAlta will have the ability to obtain and retain qualified personnel and equipment in a timely and cost-efficient manner in order to provide services to the Company in accordance with the terms of the Management and Operational Services Agreement; that TransAlta will make available to the Company acquisition or growth opportunities from time to time to facilitate growth of the Company; that the Company will continue to have access to natural gas, wind and water resources in amounts consistent with the amounts expected by the Company and required to fulfill the obligations of the Company under its PPAs; that general economic and industry conditions in the jurisdictions in which the Company conducts and will conduct its business will remain stable in relation to current general and industry conditions; that the operating and maintenance costs of the Company will be consistent in all material respects with the Company's budgeted amounts; and the continued management and support of the Company by TransAlta.

Actual events, performance or results could differ materially from those anticipated in these forward-looking statements. Factors that may adversely impact our forward-looking statements include risks relating to: fluctuations in market prices; changes in the regulatory and political environments in the jurisdictions in which the Company operates, including changes to tax laws; environmental requirements and changes in, or liabilities under, these requirements; changes in general economic conditions including interest rates, currency fluctuations and/or credit markets; operational risks involving the Company's facilities, including unplanned outages at such facilities; disruptions in the transmission and distribution of electricity; the effects of weather and other climate-related risks as it relates to projects under construction and in operations; disruptions in the source of water or wind required to operate our facilities; natural disasters; disputes with third parties, including the dispute with FMG regarding commercial operation at South Hedland and pending litigation involving TransAlta; cybersecurity attacks; equipment failure and the Company's ability to carry out or have completed the repairs in a cost-effective manner or timely manner; commodity risk management; industry risk and competition; the need for additional financing; structural subordination of securities; counterparty credit risk; insurance coverage; the Company being unable to renew certain long-term power purchase agreements; the Company's provision for income taxes; outcomes of investigations and disputes; reliance on key personnel; labour relations matters; and development projects and acquisitions, including delays in the construction and commissioning of the Windrise wind farm. The foregoing risk factors, among others, are described in further detail under the heading "Risk Factors" in this Annual Information Form and in the documents incorporated by reference in this Annual Information Form, including our Management's Discussion and Analysis for the year ended December 31, 2019 (the "Annual MD&A").

Readers are urged to consider these factors carefully in evaluating the forward-looking statements and are cautioned not to place undue reliance on these forward-looking statements. The forward-looking statements included in this AIF are made only as of the date hereof and we do not undertake to publicly update these forward-looking statements to reflect new information, future events or otherwise, except as required by applicable laws. In light of these risks, uncertainties and assumptions, the forward-looking events might occur to a different extent or at a different time than we have described or might not occur at all. We cannot assure that projected performance, results or events will be achieved.

## DOCUMENTS INCORPORATED BY REFERENCE

TransAlta Renewables' audited consolidated financial statements for the year ended December 31, 2019, and related management's discussion and analysis are hereby specifically incorporated by reference in this AIF. Copies of these documents are available on the System for Electronic Document Analysis and Retrieval ("SEDAR") under TransAlta Renewables' SEDAR profile at [www.sedar.com](http://www.sedar.com).

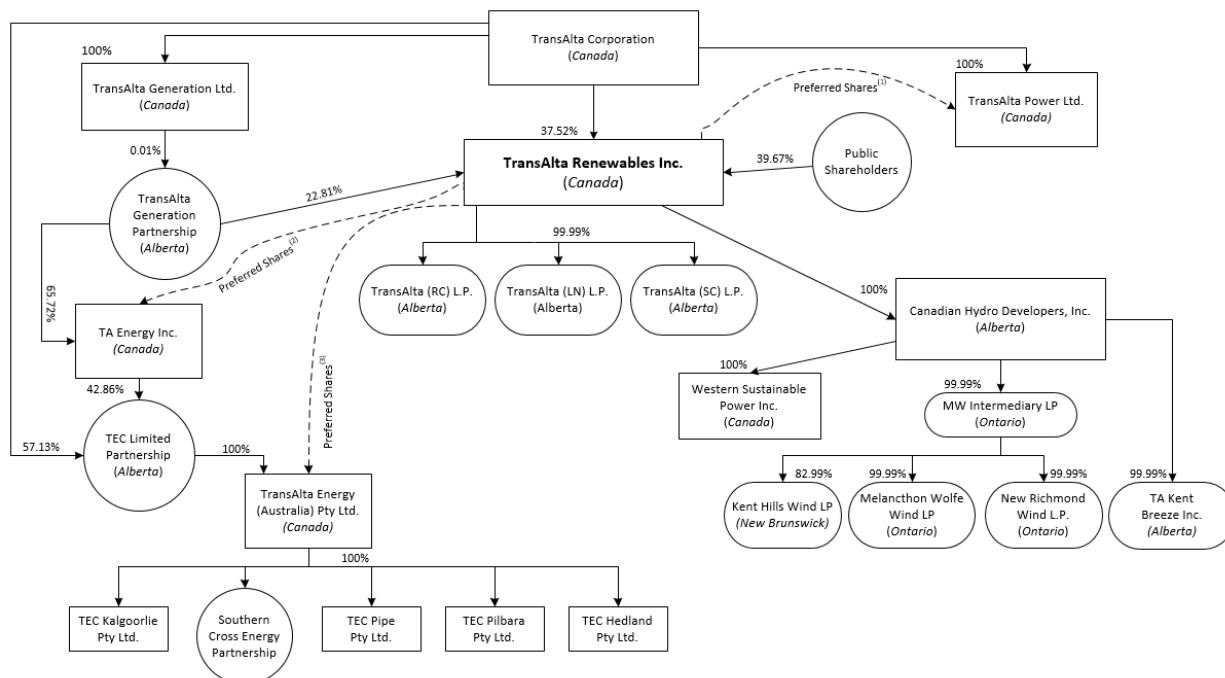
## CORPORATE STRUCTURE

### *Name and Incorporation*

TransAlta Renewables was incorporated under the *Canada Business Corporations Act* (the "CBCA") on May 28, 2013, as 8532290 Canada Ltd. On June 18, 2013, the Company amended its articles, changing its name to TransAlta Renewables Inc. On January 1, 2020, the Company amalgamated with its wholly owned subsidiary, Kenwind Energy Inc., under the

name TransAlta Renewables Inc. The head and registered office of the Company is located at 110 – 12 Avenue S.W., Calgary, Alberta T2R 0G7.

As of the date of this Annual Information Form, the principal subsidiaries and principal shareholders of TransAlta Renewables and their respective jurisdictions of formation are set out below. Note that percentages do not add due to omitted subsidiaries.



Notes:

1. TransAlta Power Ltd. is a wholly owned subsidiary of TransAlta Corporation that has issued preferred shares to TransAlta Renewables Inc., to facilitate acquisitions by TransAlta Renewables of an economic interest in Wyoming Wind, Antrim Level LLC, Mass Solar and Lakeswind from TransAlta Corporation and to facilitate the implementation of a new amortizing term loan financing structure following the redemption of the Mandatory Redeemable Preferred Shares in response to the enactment of anti-hybrid tax rules in Australia.
2. TA Energy Inc. ("TA Energy") is a wholly owned subsidiary of TransAlta Corporation. TA Energy issued preferred shares on May 7, 2015 to facilitate the acquisition by TransAlta Renewables of an economic interest based on the cash flows of TransAlta's Australian Assets. For details of the investment, please refer to "Business of TransAlta Renewables – Economic Interest in Australian Assets" in this AIF.
3. TransAlta Energy (Australia) Pty Ltd. ("TEA") is a wholly owned subsidiary of TransAlta Corporation. TEA issued preferred shares on September 25, 2015, in connection with the Company's investment in the Australian Assets. For details of the investment, please refer to "Business of TransAlta Renewables – Economic Interest in Australian Assets" in this AIF.

## OVERVIEW

TransAlta Renewables is one of the largest generators of wind power in Canada and is among the largest publicly traded renewable power generation companies in Canada. Our asset platform is diversified in terms of geography, generation and counterparties. It consists of interests in 23 wind facilities, 13 hydroelectric facilities, seven natural gas generation facilities, one solar facility and one natural gas pipeline, representing an ownership interest of approximately 2,527 MW of owned capacity. Our operations span three countries: Canada, the United States and Australia. In Canada, our assets are located in the provinces of British Columbia, Alberta, Ontario, Québec, and New Brunswick. In the United States, our assets are located in the states of Wyoming, Massachusetts, Minnesota, New Hampshire and Pennsylvania. This includes our economic interests in the 140 MW Wyoming wind farm, the 50 MW Lakeswind wind farm, the 21 MW Mass Solar facility, the 90 MW Big Level wind farm and the 29 MW Antrim wind farm. Our Australia operations are located in the State of Western Australia and are comprised of economic interests in six operating gas generation facilities with an installed capacity of 450 MW and a 270 km gas pipeline. Our assets have a weighted average years of operation by capacity of 14.7 years, including the assets in which we hold an economic interest.

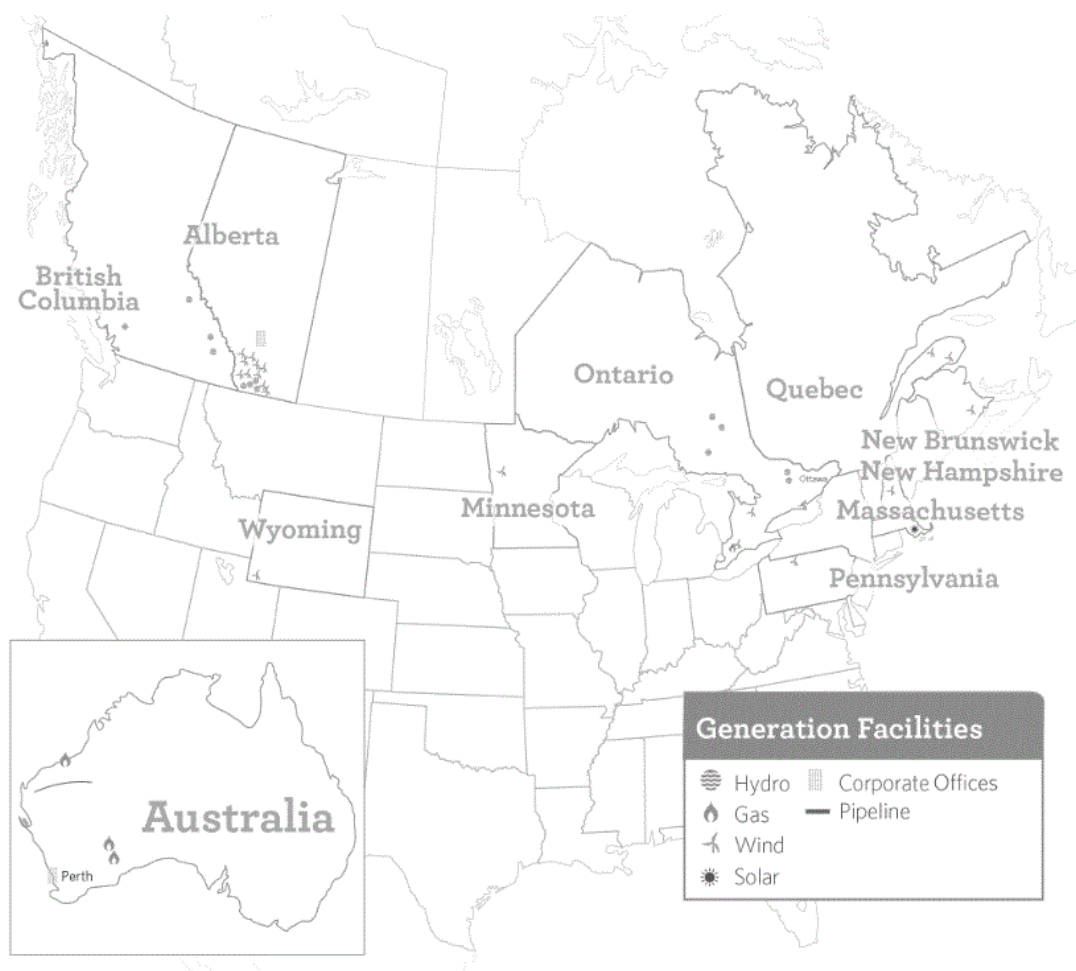
The Company was formed to own a portfolio of power generation facilities. Our objectives are to (i) provide stable, consistent returns for investors through the ownership of, and investment in, highly contracted renewable and natural gas power generation and other infrastructure assets that provide stable cash flow primarily through long-term

contracts with strong counterparties; (ii) pursue and capitalize on strategic growth opportunities in the renewable and natural gas power generation and other infrastructure sectors; (iii) maintain diversity in terms of geography, generation and counterparties; and (iv) pay out 80 to 85 per cent of cash available for distribution to the shareholders of the Company on an annual basis.

Generation output from our assets is sold pursuant to long-term PPAs with strong counterparties, including public power authorities, load-serving utilities, industrial customers and TransAlta. Pursuant to the PPAs with TransAlta, TransAlta is obligated to purchase, for a fixed price, all of the power produced from such facilities. In addition to contracting for power, long-term and short-term contracts have been entered into to sell the environmental attributes from certain of our wind and hydroelectric facilities. See "*Business of TransAlta Renewables - Power Sales, Grants and Incentives*".

### *TransAlta Renewables Map of Operations*

The following map depicts the location of our facilities as of December 31, 2019, and includes the assets in which we own an economic interest.



## GENERAL DEVELOPMENT OF THE BUSINESS

TransAlta Renewables was formed on May 28, 2013. On August 9, 2013, in connection with closing the \$200 million initial public offering of our Common Shares, we acquired an aggregate of 28 wind and hydroelectric assets from TransAlta for aggregate consideration of approximately \$1.7 billion. The significant events and conditions affecting our business are summarized below. Certain of these events and conditions are discussed in greater detail under the heading "*Business of TransAlta Renewables*".

## *Three-Year History*

### **2020**

#### *Anticipated Developments for 2020*

Our growth strategy is to acquire or develop highly contracted, high-quality renewable and natural gas power generation facilities and other infrastructure assets that generate stable cash flows, with the objective of achieving strong returns on invested capital. We rely on TransAlta to be successful in our strategy, and TransAlta has identified four drop-down candidates. These four drop-down candidates include the Windrise wind project, the Windcharger battery project and an on-site cogeneration project, all located in Alberta, and the Skookumchuck wind project located in the State of Washington. With the exception of the Windcharger battery project, these projects have long-term contracts with strong counterparties, making them excellent drop-down candidates. In addition to these identified projects, TransAlta regularly evaluates the growth opportunities of renewables, natural gas and on-site cogeneration opportunities that could fit well within our growth objectives and investment criteria.

#### *TransAlta Renewables Delivers on Two Contracted US Wind Projects*

On January 7, 2020, we announced that the 90 MW wind project located in Pennsylvania ("Big Level") and the 29 MW wind project located in New Hampshire ("Antrim") began commercial operations on December 19, 2019, and December 24, 2019, respectively. TransAlta Renewables has an economic interest in these two US wind farms. The 90 MW Big Level wind farm located in Pennsylvania is under a 15-year contract with Microsoft and the 29 MW Antrim wind farm located in New Hampshire is under two 20-year contracts with Partners HealthCare and New Hampshire Electric Co-op, respectively. All counterparties have a Standard & Poor's credit rating of A+ or better.

In December 2019, coincident with Antrim and Big Level each achieving commercial operation, approximately \$166 million (US\$126 million) of tax equity proceeds were raised by the TransAlta project entities to partially fund the construction of the Antrim and Big Level wind farms for proceeds of US\$41 million and US\$85 million, respectively. As TransAlta Renewables provided funding during the construction period with a combination of tracking preferred shares and interest-bearing notes issued by the project entity, the tax equity proceeds will be used to repay TransAlta Renewables the principal and accrued interest outstanding on the interest-bearing promissory notes issued to fund the construction. From the tax equity proceeds, a subsidiary of TransAlta repaid \$52 million (US\$40 million) of the interest-bearing promissory notes to the Company. The remaining amount of the tax equity proceeds is held as reserves within the project entity and will be released upon the payment of all outstanding project costs and the satisfaction of certain other conditions. Once these conditions are met, the reserves will be released and the subsidiary of TransAlta will repay the remaining outstanding interest-bearing promissory notes to the Company. The Company anticipates subscribing for additional tracking preferred shares to fund the remaining construction costs payable.

### **2019**

#### *Mandatory Redeemable Preferred Shares ("MRPS") Redemption and Investment in Australian Loan Tracking Preferred Shares*

The Company and TransAlta executed a series of transactions in response to the enactment of anti-hybrid tax rules in Australia. In January 2019, TransAlta Energy (Australia) Pty Ltd. ("TEA") redeemed the remaining outstanding balance of the MRPS of AUD\$509 million and approximately AUD\$41 million of the preferred shares of TEA for cash consideration. Immediately following those redemptions, the Company subscribed for AUD\$550 million of preferred shares of a subsidiary of TransAlta that track the underlying economics of an amortizing term loan payable by TEA to another subsidiary of TransAlta (the "Australian Loan Tracking Shares"). The Australian Loan Tracking Shares will pay dividends, as declared, approximately equal to the interest payments on the underlying loan. The Australian Loan Tracking Shares tracking the amortizing term loan will be redeemed when scheduled or other principal repayments occur on the underlying loan. The dividends, as declared, and scheduled redemptions will be fixed in Canadian dollars until June 30, 2020, at the hedged rates guaranteed by TransAlta, provided that any unscheduled repayment of principal on the underlying loan will result in a redemption of Australian Loan Tracking Shares at the Canadian spot price. The shares are accounted for at fair value, with changes in fair value recognized in earnings. See "*Business of TransAlta Renewables - Investment Agreement - Australian Assets*" and "*Capital and Loan Structure*".

#### *Management and Board of Directors Changes*

On May 16, 2019, we appointed Brent Ward to the role of Chief Financial Officer of TransAlta Renewables. Todd Stack, the previous Chief Financial Officer, was appointed to the Chief Financial Officer role of TransAlta. Mr. Ward also serves as Managing Director and Treasurer of TransAlta.

On August 1, 2019, Mr. David Drinkwater was appointed Chair of the Board of Directors. Mr. Allen Hagerman's term as Chair expired pursuant to the terms of the Chair Terms of Reference. Mr. Hagerman continues to serve as an independent director on the Board of Directors.

## 2018

### *New Brunswick Wind Power Expansion Complete*

On October 18, 2018, the 17.25 MW expansion of the Kent Hills wind farm reached commercial operation, bringing total generating capacity at the site to 167 MW. Under the 17-year power purchase agreement, New Brunswick Power receives both energy to the province's electricity grid and renewable energy credits. At the same time, the term of the Kent Hills 1 contract with New Brunswick Power was extended from 2033 to 2035, aligning with the expiry of the Kent Hills 2 and Kent Hills 3 wind projects. The Kent Hills 3 expansion is located on approximately 20 acres of Crown land and consists of five Vestas V126 turbines. Natural Forces Technologies Inc., a wind-energy developer based in Atlantic Canada, owns a 17 per cent interest in the project.

### *\$150 Million Bought Deal Offering of Common Shares*

On June 13, 2018, we entered into an agreement with a syndicate of underwriters for an offering, on a bought deal basis, of 11,860,000 Common Shares in the capital of the Company at a price of \$12.65 per share for gross proceeds of approximately \$150 million. On June 22, 2018, the offering closed for gross proceeds to the Company of \$150 million. TransAlta did not purchase any of these common shares. The net proceeds were used to partially repay drawn amounts under our credit facility, which were drawn to fund acquisitions. The additional liquidity under the credit facility was used for general corporate purposes, including ongoing construction costs associated with such acquisitions.

### *Implementation of a Dividend Reinvestment Plan*

On May 31, 2018, the Board of Directors approved the implementation of a dividend reinvestment plan ("DRIP") for Canadian holders of Common Shares. The price for Common Shares purchased under the DRIP is 98 per cent of the average market price of the Common Shares for the five trading days on which not less than 500 Common Shares are traded immediately prior to the dividend payment date. Common Shares acquired under the DRIP are issued from the treasury of the Company. Eligible shareholders are not required to participate in the DRIP. TransAlta does not participate in the DRIP.

### *Acquisition of Three Renewable Assets*

On May 31, 2018, we acquired an economic interest from TransAlta in the 50 MW Lakeswind wind farm and 21 MW of solar projects. The total purchase price for the two assets was \$65 million (US\$50 million), net of the indirect economic assumption of \$62 million (US\$48 million) of tax equity obligations and project debt. The investment consists of tracking preferred shares of a subsidiary of TransAlta that provides cash flows broadly equal to the underlying net distributable profits (after satisfaction of tax equity and debt obligations) of the entities that own the Lakeswind wind farm and Mass Solar facilities. In addition, we acquired ownership of the 20 MW Kent Breeze wind farm for a total purchase price of \$39 million. The total purchase price for the three assets was \$166 million, including the assumption of \$62 million of tax equity obligations and project debt.

On June 28, 2018, the Company subscribed for an additional \$33 million (US\$25 million) of tracking preferred shares of a subsidiary of TransAlta, in order to fund the repayment of Mass Solar's project debt. The project debt was subsequently repaid by TransAlta without penalty on June 28, 2018.

### *Acquisition of Two US Wind Projects*

On February 20, 2018, we announced that we had entered into an arrangement with TransAlta to acquire economic interests in the Big Level and Antrim wind development projects ("US Wind Projects"). A subsidiary of TransAlta acquired Big Level on March 1, 2018, and Antrim on March 28, 2019. The economic interest in the US Wind Projects are represented by preferred shares issued by TransAlta Power Ltd. ("TA Power"), a wholly owned subsidiary of TransAlta. TransAlta Renewables also agreed to fund the total estimated construction and acquisition costs for the US Wind Projects through the subscription of tracking preferred shares issued by TA Power or interest-bearing promissory notes issued by the project entity, a wholly owned subsidiary of TransAlta. The tracking preferred shares issued by TA Power to TransAlta Renewables have preference over the common shares of TA Power held by TransAlta.

The tracking preferred shares pay us quarterly dividends that broadly equal the underlying net distributable profits (after satisfaction of the project's tax equity debt obligations) of the entity that directly owns the Antrim and Big Level wind farms.

## 2017

### *New Brunswick Wind Asset Project Financing*

On October 2, 2017, we completed a \$260 million bond offering on behalf of our indirect majority-owned subsidiary, Kent Hills Wind LP, which is secured by a first ranking charge over all assets of Kent Hills Wind LP. The bonds are amortizing and bear interest from their date of issue at a rate of 4.454 per cent, payable quarterly and mature on



November 30, 2033. Net proceeds were used to fund a portion of the construction costs for the 17.25 MW Kent Hills expansion, which achieved commercial operation in October 2018, and advances have been made to Canadian Hydro Developers, Inc. ("CHD") and to an affiliate of Natural Forces Technologies Inc., the Company's partner who owns approximately 17 per cent of Kent Hills Wind LP. The proceeds of the advances to CHD were used to redeem all of CHD's outstanding debentures.

#### *Status of Commercial Operations at South Hedland facility*

On August 1, 2017, Fortescue Metals Group Limited ("FMG") notified TransAlta that, in its view, the South Hedland facility (a 150 MW combined cycle gas power station in South Hedland, Australia) had not yet satisfied the requisite performance criteria under the South Hedland Power Purchase Agreement between FMG and TransAlta (the "South Hedland PPA"). In TransAlta's view, all conditions to establish commercial operations have been fully satisfied under the terms of the South Hedland PPA. Horizon Power, the local utility and pricing off-taker of the majority of the generation from the facility, has confirmed and not disputed commercial operation. On November 13, 2017, FMG issued a notice purporting to terminate the South Hedland PPA. TransAlta's view is that the purported termination is invalid. TransAlta continues to invoice FMG for monthly capacity in accordance with the terms of the South Hedland PPA. The dispute is currently being litigated in the Supreme Court of Western Australia. See "*Legal Proceedings and Regulatory Actions*" for further information.

#### *FMG's Repurchase of the Solomon Facility*

On August 1, 2017, TransAlta received notice of FMG's intention to repurchase the Solomon facility from TEC Pipe Pty Ltd. ("TEC Pipe"), a wholly owned subsidiary of the Corporation, for approximately US\$335 million. We held an economic interest in the cash flows generated from the Solomon Power Station. A dispute does exist between TransAlta and FMG related to the transfer of the Solomon Power Station to FMG. FMG claims certain amounts related to the condition of the facility while TransAlta claims certain outstanding costs that should be reimbursed. A trial date for this matter has not yet been scheduled but it will likely not occur until 2021.

#### *Class B Share Conversion and Dividend Increase*

Effective August 1, 2017, the 26.1 million Class B Shares in the capital of TransAlta Renewables held by TransAlta were converted into 26.4 million Common Shares. TransAlta's voting interest in the capital of TransAlta Renewables remained at 64 per cent immediately following the conversion. As a result of commissioning the South Hedland facility, the Board of Directors approved an increase in the dividend of \$0.06 per Common Share per year or approximately seven per cent.

#### *Commissioning of the South Hedland Facility*

On July 28, 2017, we announced that the South Hedland facility, located in the Pilbara Region of Western Australia, began commercial operation. The 150 MW combined-cycle natural gas power station is one of the most efficient power plants in Western Australia, providing low-cost electricity and generating low greenhouse gas ("GHG") emissions.

## BUSINESS OF TRANSALTA RENEWABLES

Our Canadian Wind, Canadian Hydro and Canadian Gas business segments are responsible for operating and maintaining our electrical generation facilities. All the segments are supported by a corporate segment. The Company has entered into the Management and Operational Services Agreement with TransAlta pursuant to which TransAlta provides all management, administrative and operational services to the Company in exchange for a management fee. See "*Material Contracts*" for further details. As we have an economic interest, and not direct ownership, of the Australian Assets, the Wyoming Wind Farm, the Lakeswind wind farm, the Mass Solar facility, the Antrim wind farm and the Big Level wind farm, the operational results of these assets are not consolidated into our financial statement results and do not form a segment. Instead, we receive finance income on the underlying investments, which is included in our consolidated net earnings.

The following table identifies each revenue generating business segment's contribution to revenues (excluding the assets in which we hold an economic interest):

	<u>2019 Revenues</u>	<u>2018 Revenues</u>
Canadian Wind	54%	52%
Canadian Hydro	6%	5%
Canadian Gas	40%	43%

The finance income from the assets in which we hold an economic interest, although not reflected in the table above, collectively represented approximately 15 per cent and 24 per cent of total comparable revenue for the years ended December 31, 2019 and 2018, respectively. For further information on our business segment earnings and assets, please refer to our Annual MD&A and Note 26 of our audited consolidated financial statements for the year ended December 31, 2019, which financial statements are incorporated by reference herein. See "*Documents Incorporated by Reference*" in this AIF.

Our generation facilities consist of 19 wind facilities, 13 hydroelectric facilities and one natural gas facility located in the provinces of British Columbia, Alberta, Ontario, Québec and New Brunswick. We also hold economic interests in wind facilities in the states of Wyoming, Minnesota, New Hampshire and Pennsylvania, a solar facility in the state of Massachusetts, and gas facilities in Western Australia. The following information summarizes our wind, hydroelectric, natural gas, solar and infrastructure facilities.

### *Canadian Wind Facilities*

We own approximately 1,136 MW of net wind generation capacity in 19 wind farms, with 10 wind farms in Alberta, four in Ontario, three in New Brunswick and two in Québec. All of the wind projects are managed by TransAlta pursuant to the Management and Operational Services Agreement and are situated on lands owned by unrelated parties and subject to long-term leases. See "*Employee and Governance Matters - Management and Operational Services Agreement*". All of the facilities have also entered into long-term service agreements with TransAlta or independent third parties, which expire at different times. Upon expiry, we expect that these existing agreements will be renewed or alternate agreements will be entered into with either TransAlta or other independent third parties, provided that reasonable commercial terms can be obtained.

As well as contracting for power, we enter into long-term and short-term contracts to sell the environmental attributes from our wind facilities. Other than the PPAs with TransAlta, our facilities under long-term contract generally include delivery commitments for both the delivery of power and the environmental attributes. See "*Business of TransAlta Renewables - Power Sales, Grants and Incentives*".

All of the electricity generated and sold by our Alberta and Québec wind sites are from facilities that are EcoLogo certified. We are an EcoLogo certified distributor of Alternative Source Electricity through Environment Canada's Environmental Choice program. EcoLogo certification is granted to products with environmental performance that meet or exceed all government, industrial safety and performance standards.

The following table summarizes our wind generation facilities:

Facility Name <sup>(1)</sup>	Province/ State	Ownership (%)	Net Capacity Ownership Interest (MW) <sup>(4)</sup>	Commercial Operation Date	Counterparty	Contract Expiry Date
<b>Alberta Wind Facilities</b>						
Ardenville	AB	100	69	2010	TransAlta	2033
Blue Trail	AB	100	66	2009	TransAlta	2033
Castle River	AB	100	44	1997, 2001	TransAlta	2027
Cowley North	AB	100	20	2001	TransAlta	2031
Macleod Flats	AB	100	3	2005	TransAlta	2033
McBride Lake	AB	50	38	2004	ENMAX	2024
Sinnott	AB	100	7	2001	TransAlta	2031
Soderglen	AB	50	35	2006	TransAlta	2033
Summerview 1	AB	100	68	2004	TransAlta	2033
Summerview 2	AB	100	66	2010	TransAlta	2033
<b>Eastern Canada Wind Facilities</b>						
Kent Breeze <sup>(2)</sup>	ON	100	20	2011	IESO	2031
Kent Hills 1	NB	83	80	2008	NB Power	2035
Kent Hills 2	NB	83	45	2010	NB Power	2035
Kent Hills 3 <sup>(3)</sup>	NB	83	14	2018	NB Power	2035
Le Nordais	QC	100	98	1999	Hydro-Québec	2033
Melancthon 1	ON	100	68	2006	IESO	2026
Melancthon 2	ON	100	132	2008	IESO	2028
New Richmond	QC	100	68	2013	Hydro-Québec	2033
Wolfe Island	ON	100	198	2009	IESO	2029
<b>Total Canadian Wind Net Capacity</b>			<b>1,136</b>			

Notes:

- Does not include wind assets in which we hold economic interests. See "Business of TransAlta Renewables - Economic Interest in Wyoming Wind Farm", "Business of TransAlta Renewables - Economic Interest in Lakeswind Wind Farm", "Business of TransAlta Renewables - Economic Interest in Big Level Wind Farm" and "Business of TransAlta Renewables - Economic Interest in Antrim Wind Farm".
- We acquired the Kent Breeze wind farm on May 31, 2018 from TransAlta Corporation. See "General Development of the Business - 2018 - Acquisition of Three Renewable Assets".
- Kent Hills 3 reached commercial operation on October 18, 2018.
- MW are net amounts and are rounded to the nearest whole number; column does not add due to rounding.

## Alberta Wind Facilities

### Ardenville

The 69 MW Ardenville wind facility is a wholly owned facility that is comprised of 23 3.0 MW Vestas V90 wind turbines on 80-metre towers, and is located approximately eight kilometres south of Fort Macleod, Alberta, adjacent to the Company's Macleod Flats wind facility. This facility began commercial operations in November 2010. Generation from this facility is subject to the terms of a PPA with TransAlta (a "TransAlta PPA") that terminates in 2033. In 2018, the Ardenville wind farm was granted an extension to create offset credits under the Alberta Technology Innovation and Emissions Reduction ("TIER") Regulation until October 2023 and is entitled to receive ecoENERGY payments until November 2020.

### *Blue Trail*

The 66 MW Blue Trail wind facility is a wholly owned facility that is comprised of 22 3.0 MW Vestas V90 wind turbines on 80-metre towers, and is located in southern Alberta, near Fort Macleod. This facility began commercial operations in November 2009. Generation from this facility is subject to the terms of a TransAlta PPA that terminates in 2033. The Blue Trail wind farm creates carbon offset credits under TIER until September 2022 and was entitled to receive ecoENERGY payments until November 2019.

### *Castle River*

The 44 MW Castle River wind facility is a wholly owned facility that is comprised of 66 Vestas wind turbines (three Vestas V44 600 kW wind turbines and 63 Vestas V47 660 kW wind turbines) on 50-metre towers, and is located southwest of Pincher Creek, Alberta. This facility also includes an additional six turbines, totalling 4 MW, that are located individually in the Cardston County and Hillspring areas of southwestern Alberta. This facility began commercial operations in stages from November 1997 through to July 2001. This facility generates Emission Performance Credits ("EPCs") under the TIER system. Generation from this facility is subject to the terms of a TransAlta PPA that terminates in 2027.

### *Cowley North*

The 20 MW Cowley North wind facility is a wholly owned facility that is comprised of 15 1.3 MW Nordex N60 wind turbines on 65-metre towers, and is located near the towns of Cowley and Pincher Creek, in southern Alberta. This facility began commercial operations in the fall of 2001. The Cowley North wind farm creates EPCs under TIER. Generation from this facility is subject to the terms of a TransAlta PPA that terminates in 2031.

### *Macleod Flats*

The 3 MW Macleod Flats wind facility is wholly owned, consisting of a single 3.0 MW Vestas V90 wind turbine on a 67-metre tower, and is located south of Fort Macleod, Alberta. This facility began commercial operations in January 2005. This facility generates renewable credits. Generation from this facility is subject to the terms of a TransAlta PPA that terminates in 2033.

### *McBride Lake*

The 75 MW McBride Lake wind facility, which is equally owned with ENMAX Generation Portfolio Inc., is comprised of 114 Vestas V47 (660 kW) wind turbines on 50-metre towers, and is located south of Fort Macleod, Alberta. This facility began commercial operations in April 2004. Generation from this facility is sold under a 20-year PPA with ENMAX Energy Corp. that terminates in 2024. This facility creates EPCs under the TIER system.

### *Sinnott*

The 7 MW Sinnott wind facility is a wholly owned facility that is comprised of five 1.3 MW Nordex N60 wind turbines on 65-metre towers, and is located directly east of the Cowley North wind facility and north of Pincher Creek, Alberta. This facility began commercial operations in the fall of 2001. The Sinnott wind farm creates EPCs under the TIER system. Generation from this facility is subject to the terms of a TransAlta PPA that terminates in 2031.

### *Soderglen*

The 71 MW Soderglen wind facility, which is equally owned with CNOOC Petroleum North America ULC, is comprised of 47 1.5 MW GE SLE wind turbines on 65-metre towers, and is located southwest of Fort Macleod. This facility began commercial operations in September 2006. The Soderglen wind farm creates EPCs under the TIER system. Generation from this facility is subject to the terms of a TransAlta PPA that terminates in 2033 (which excludes that portion of generation that is owned by CNOOC Petroleum North America ULC).

### *Summerview 1*

The 68 MW Summerview 1 wind facility is a wholly owned facility that is comprised of 38 1.8 MW Vestas V80 wind turbines on 67-metre towers, and is located approximately 15 kilometres northeast of Pincher Creek, Alberta. This facility began commercial operations in September 2004. The Summerview 1 facility creates EPCs under the TIER system. Generation from this facility is subject to the terms of a TransAlta PPA that terminates in 2033.

### *Summerview 2*

The 66 MW Summerview 2 wind facility is a wholly owned facility that is comprised of 22 3.0 MW Vestas V90 wind turbines on 80-metre towers, and is also located northeast of Pincher Creek, Alberta. This facility began commercial operations in February 2010. Generation from this facility is subject to the terms of a TransAlta PPA that terminates in 2033. The Summerview 2 wind farm expansion creates carbon offset credits under TIER until November 2022, at which

time the facility will become an opt-in facility under TIER. Summerview 2 was entitled to receive ecoENERGY payments until February 2020.

### **Eastern Canada Wind Facilities**

#### *Kent Breeze*

The 20 MW Kent Breeze wind project is a wholly owned facility that is comprised of eight 2.5 MW GE wind turbines on 85-metre towers, and is located in Thamesville, Ontario. This facility commenced commercial operations in 2011. Generation from this facility is sold to the Independent Electricity System Operation ("IESO"). Kent Breeze is entitled to receive eERP ("Emerging Renewable Power Program") payments until December 2021.

#### *Kent Hills 1*

The 96 MW Kent Hills 1 wind facility, in which the Company has an 83 per cent interest, is comprised of 32 3.0 MW Vestas V90 wind turbines on 80-metre towers, and is located near Moncton, New Brunswick. This facility began commercial operations in December 2008. Natural Forces Technologies Inc., a wind developer based in Atlantic Canada, co-developed this project with TransAlta and exercised its option to purchase 17 per cent of the Kent Hills 1 project in May 2009. Generation from this facility is sold under a 25-year PPA with New Brunswick Power that terminates in 2033. On June 1, 2017, we extended the term of the PPA by two years to 2035.

#### *Kent Hills 2*

The 54 MW Kent Hills 2 wind facility expansion, in which the Company has an 83 per cent interest, is comprised of 18 3.0 MW Vestas V90 wind turbines on 80-metre towers. Natural Forces Technologies Inc. owns the remaining 17 per cent interest. The facility began commercial operations in November 2010. Generation from this facility is sold under a 25-year PPA with New Brunswick Power that terminates in 2035. Kent Hills 2 is entitled to receive ecoENERGY payments until November 2020.

#### *Kent Hills 3*

Kent Hills 3, in which the Company has an 83 per cent interest, achieved commercial operation on October 18, 2018, and added five 3.45 MW Vestas V126 turbines to the Kent Hills fleet for an additional 17.25 MW at the site. The Kent Hills 3 PPA terminates in 2035. See "*General Development of the Business - Three Year History - 2018 - New Brunswick Wind Power Expansion Complete*".

#### *Le Nordais*

The 98 MW Le Nordais wind facility is located at two sites: Cap-Chat with 55.5 MW of installed capacity comprised of 74 750 kW NEG-Micon wind turbines on 55-metre towers; and Matane with 42 MW of installed capacity comprised of 56 750 kW NEG-Micon wind turbines on 55-metre towers. Le Nordais is located on the Gaspé Peninsula of Québec. It commenced commercial operations in 1999. Generation from this facility is sold to Hydro-Québec and generates Renewable Energy Credits ("RECs"). On January 6, 2016, the Company acquired an economic interest based in part on the distributable profits of the Le Nordais wind facility and, subsequently, on November 30, 2016, the Company acquired direct ownership of Le Nordais.

#### *Melancthon 1*

The 68 MW Melancthon 1 wind facility is a wholly owned facility that is comprised of 45 1.5 MW GE wind turbines on 80-metre towers, and is located in Melancthon Township near Shelburne, Ontario. This facility began commercial operations in March 2006. Generation from this facility is sold to the Ontario IESO pursuant to a PPA that terminates in 2026.

#### *Melancthon 2*

The 132 MW Melancthon 2 wind facility is a wholly owned facility that is comprised of 88 1.5 MW GE wind turbines on 80-metre towers, and is located adjacent to Melancthon 1, in Melancthon and Amaranth Townships, Ontario. This facility began commercial operations in November 2008. Generation from this facility is sold to the IESO pursuant to a PPA that terminates in 2028.

#### *New Richmond*

The 68 MW New Richmond wind facility is a wholly owned facility that is comprised of 27 2.0 MW and six 2.3 MW Enercon E82 wind turbines on 100-metre towers, and is located in New Richmond, Québec. This facility began commercial operations in March 2013. Generation from this facility is sold under a 20-year electricity supply agreement with Hydro-Québec Distribution that terminates in 2033.

## Wolfe Island

The 198 MW Wolfe Island wind facility is a wholly owned facility that is comprised of 86 2.3 MW Siemens SWT 93 wind turbines on 80-metre towers, and is located on Wolfe Island, near Kingston, Ontario. This facility began commercial operations in June 2009. Generation from this facility is sold to the Ontario IESO pursuant to a PPA that terminates in 2029. Wolfe Island was entitled to receive ecoENERGY payments until June 2019.

## Canadian Hydro Facilities

We own approximately 112 MW of net hydroelectric generation capacity across 10 different river systems in the provinces of British Columbia, Alberta and Ontario. All of the hydroelectric facilities are run-of-river, and the electricity generated and sold by these assets is from facilities that are EcoLogo certified. All of the hydroelectric facilities are operated by TransAlta under the terms of the Management and Operational Services Agreement, and are situated on lands subject to long-term leases.

The following table summarizes our hydroelectric facilities:

Facility Name	Province	Ownership (%)	Net Capacity Ownership Interest (MW) <sup>(1)</sup>	Commercial Operation Date	Counterparty	Contract Expiry Date
BC Hydro Facilities						
Akolkolex	BC	100	10	1995	BC Hydro	2046
Bone Creek	BC	100	19	2011	BC Hydro	2031
Pingston	BC	50	23	2003, 2004	BC Hydro	2023
Upper Mamquam	BC	100	25	2005	BC Hydro	2025
Alberta Hydro Facilities						
Belly River	AB	100	3	1991	TransAlta	2033
St. Mary	AB	100	2	1992	TransAlta	2033
Taylor Hydro	AB	100	13	2000	TransAlta	2033
Waterton	AB	100	3	1992	TransAlta	2033
Ontario Hydro Facilities						
Appleton	ON	100	1	1994	IESO	2030
Galetta	ON	100	2	1998	IESO	2030
Misema	ON	100	3	2003	IESO	2027
Moose Rapids	ON	100	1	1997	IESO	2030
Ragged Chute	ON	100	7	1991	IESO	2029
<b>Total Hydroelectric Net Capacity</b>			<b>112</b>			

Note:

(1) MW are net amounts and are rounded to the nearest whole number.

### BC Hydro Facilities

#### Akolkolex

Akolkolex is a run-of-river hydroelectric facility with installed capacity of 10 MW located on the Akolkolex River south of Revelstoke, British Columbia. This wholly owned facility utilizes two horizontal Chongqing Francis turbines on a common shaft with a single Chongqing generator. This facility began commercial operations in April 1995. In 2016, TransAlta entered into a new 30-year agreement to sell the generation from this facility to BC Hydro.

#### Bone Creek

Bone Creek is a run-of-river hydroelectric facility with installed capacity of 19 MW located on Bone Creek, 90 kilometres south of the town of Valemount, British Columbia. The wholly owned facility utilizes two 9.5 MW horizontal turbine generator units, with twin Francis double draft tube Litostroj turbines and direct drive INDAR horizontal generators. This facility began commercial operations in June 2011. Generation from the facility is sold to BC Hydro

under a PPA that terminates in 2031. Bone Creek is entitled to receive ecoENERGY incentive payments until December 2020.

#### *Pingston*

Pingston is a run-of-river hydroelectric facility with installed capacity of 45 MW located on Pingston Creek southwest of Revelstoke, British Columbia and down river of the Company's Akolkolex facility. Pingston, which is equally owned with Brookfield Renewable Power Inc., utilizes three 15 MW horizontal Pelton turbines and Leroy Somer generators. This facility began commercial operations in May 2003. Generation from the facility is sold to BC Hydro under a PPA that terminates in 2023.

#### *Upper Mamquam*

Upper Mamquam is a run-of-river hydroelectric facility with installed capacity of 25 MW located on the Mamquam River east of Squamish, British Columbia, and north of Vancouver. The wholly owned facility utilizes two horizontal axis double Litostroj Francis turbines and Leroy Somer generators. This facility began commercial operations in July 2005. Generation from the facility is sold to BC Hydro under a PPA that terminates in 2025.

### **Alberta Hydro Facilities**

#### *Belly River*

Belly River is a run-of-river hydroelectric facility with installed capacity of 3 MW located on the Waterton St. Mary Headworks Irrigation Canal System east of the Waterton Reservoir, approximately 75 kilometres southwest of Lethbridge, Alberta. Due to its location along the irrigation canal, Belly River operates from April to October when water is diverted through the canal as part of the St. Mary Irrigation District Water Management Plan. This wholly owned facility utilizes a double Alstom Francis turbine and an Alstom generator. This facility began commercial operations in March 1991. Generation from this facility is subject to the terms of a TransAlta PPA that terminates in 2033.

#### *St. Mary*

St. Mary is a run-of-river hydroelectric facility with installed capacity of 2 MW located at the base of the St. Mary Dam on the Waterton Reservoir near Magrath in Southern Alberta. This wholly owned facility utilizes a horizontal double Alstom Francis turbine and a Kato generator. This facility began commercial operations in December 1992. Generation from this facility is subject to the terms of a TransAlta PPA that terminates in 2033.

#### *Taylor Hydro*

The Taylor facility is a run-of-river hydroelectric facility with installed capacity of 13 MW and is located adjacent to the Taylor Coulee Chute on the Waterton St. Mary Headworks Irrigation Canal System, which is owned by the Government of Alberta. The wholly owned facility utilizes a horizontal Andritz Kaplan turbine and a GE generator. This facility began commercial operations in May 2000. Generation from this facility is subject to the terms of a TransAlta PPA that terminates in 2033.

#### *Waterton*

Waterton is a run-of-river hydroelectric facility with installed capacity of 3 MW located at the base of the Waterton Dam on the Waterton Reservoir near Hillspring, southwest of Lethbridge, Alberta. This wholly owned facility utilizes a horizontal double Alstom Francis turbine and a Kato generator. This facility began commercial operations in November 1992. Generation from this facility is subject to the terms of a TransAlta PPA that terminates in 2033.

### **Ontario Hydro Facilities**

#### *Appleton*

Appleton is a run-of-river hydroelectric facility with installed capacity of 1 MW located on the Mississippi River near Almonte, Ontario. This wholly owned facility utilizes two Canadian Hydro Components, fixed-blade propeller turbines and one adjustable-speed Andritz Kaplan turbine with three Siemens generators. This facility began commercial operations in March 1994. Generation from this facility is sold to the Ontario IESO pursuant to a PPA that terminates in 2030.

#### *Galetta*

Galetta is a run-of-river hydroelectric facility with installed capacity of 2 MW located on the Mississippi River near Galetta, Ontario. This wholly owned facility utilizes two fixed-blade propeller turbines and two horizontal quad-Francis camel-back Canadian Hydro Components turbines with four Siemens generators. This facility was originally built in 1907 and retrofitted in 1998. Generation from this facility is sold to the Ontario IESO pursuant to a PPA that terminates in 2030.

### Misema

Misema is a run-of-river hydroelectric facility with installed capacity of 3 MW located on the Misema River close to Englehart in northern Ontario. This wholly owned facility utilizes one horizontal axis double Litostroj Francis turbine with a Leroy Somer generator. This facility began commercial operations in April 2003. Generation from this facility is sold to the Ontario IESO pursuant to a PPA that terminates in 2027.

### Moose Rapids

Moose Rapids is a run-of-river hydroelectric facility with installed capacity of 1 MW located on the Wanapitei River, near Sudbury in northern Ontario. This wholly owned facility utilizes two Canadian Hydro Components slant-axis fixed-blade propeller mini-turbines and one slant-axis adjustable-speed Andritz Kaplan mini turbine with three Siemens generators. This facility began commercial operations in November 1997. Generation from this facility is sold to the Ontario IESO pursuant to a PPA that terminates in 2030.

### Ragged Chute

Ragged Chute is a run-of-river hydroelectric facility with installed capacity of 7 MW located on the Montréal River south of New Liskeard in northern Ontario. TransAlta leases this facility from Ontario Power Generation Inc. and it has been operating since 1991. The facility is comprised of a single 6.6 MW horizontal Kaplan unit and a GE generator. Generation from this facility is sold to the Ontario IESO under the Hydroelectric Contract Initiative that expires June 30, 2029. On January 6, 2016, the Company acquired an economic interest based in part on the distributable profits of the Ragged Chute hydroelectric facility and, subsequently, on November 30, 2016, the Company acquired direct ownership of Ragged Chute.

### Canadian Gas Facility

The Company completed the acquisition of an economic interest in a Sarnia cogeneration facility in January 2016 and subsequently acquired the facility on November 30, 2016.

The following table summarizes our Canadian Gas facility:

Facility Name	Province/ State	Ownership (%)	Net Capacity Ownership Interest (MW) <sup>(1)</sup>	Commercial Operation Date	Counterparty	Contract Expiry Date
Sarnia	ON	100	499	2003	LTCs	2022-2025

Note:

(1) MW are net amounts and are rounded to the nearest whole number.

The Sarnia Plant is a 499 MW Combined-Cycle cogeneration facility located in Sarnia, Ontario. The plant provides power and steam to nearby industrial facilities owned by ARLANXEO Canada Inc. (formerly LANXESS AG, successor to Bayer Inc.), Nova Chemicals (Canada) Ltd. ("NOVA") (which in turn supplies INEOS Styrolution, a Styrene production facility formerly owned by NOVA) and Suncor Energy Products Partnership under contracts terminating in 2022. The facility also provides electricity to the IESO under a contract that terminates December 31, 2025. The Company is currently evaluating potential extensions to these power and steam off-take agreements. The Sarnia Plant utilizes three Alstom 11N2 gas turbines, each capable of generating between 102 and 118 megawatts, one condensing steam turbine that can produce 120 megawatts and back-pressure steam turbines capable of generating 56 megawatts. The plant also incorporates a fired boiler, river-water pumphouses, and water treatment plants. In 2018, Sarnia's capacity was permanently reduced from 506 MW to 499 MW due to the lay-up of one generator. The reduction in capacity does not impact the plant's ability to meet its contractual requirements.



## Economic Interest in US Wind and Solar

The following table summarizes our economic interest in the US wind and solar assets:

Facility Name	Province/ State	Ownership (%)	Net Capacity Ownership Interest (MW) <sup>(1)</sup>	Commercial Operation Date	Counterparty	Contract Expiry Date
Antrim wind farm <sup>(2)</sup>	NH	100	29	2019	Partners HealthCare and New Hampshire Electric Co-op	2039
Big Level wind farm <sup>(2)</sup>	PA	100	90	2019	Microsoft	2034
Lakeswind wind farm <sup>(2)</sup>	MN	100	50	2014	Investment-Grade Counterparty	2034
Mass Solar <sup>(2)</sup>	MA	100	21	2012-2015	High-Quality Counterparties	2032-2035
Wyoming wind farm <sup>(2)</sup>	WY	100	140	2003	Investment-Grade Counterparty	2028
<b>Total US Wind and Solar Net Capacity</b>			<b>330</b>			

Notes:

(1) MW are net amounts and are rounded to the nearest whole number.

(2) The Company holds an economic interest in this facility, and does not own this facility directly or indirectly.

### Antrim

The 29 MW Antrim wind farm is comprised of nine 3.2 MW Siemens Gamesa wind turbines and is located in New Hampshire. It began commercial operations in December 2019. The Company owns the economic interest in this facility through its ownership of the Big Level and Antrim Tracking Preferred Shares. Generation from this facility is sold under two separate PPAs with two investment-grade counterparties that terminate in 2039.

### Big Level

The 90 MW Big Level wind farm is comprised of 25 3.6 MW GE wind turbines and is located in Pennsylvania. It began commercial operations in December 2019. The Company owns the economic interest in this facility through its ownership of the Big Level and Antrim Tracking Preferred Shares. Generation from this facility is sold under a PPA with an investment grade-counterparty that terminates in 2034.

### Lakeswind

The 50 MW Lakeswind wind farm is comprised of 32 1.5 MW GE wind turbines and is located in Rollag, Minnesota. It began commercial operations in 2014. The Company owns the economic interest in this facility through its ownership of the Lakeswind Tracking Preferred Shares. Generation from this facility is sold under a PPA with an investment-grade counterparty that terminates in 2034.

### Mass Solar

The 21 MW Mass Solar facility is comprised of four ground-mounted projects and four rooftop projects in Massachusetts. The projects began commercial operations between 2012 and 2015. The Company owns the economic interest in this facility through its ownership of the Mass Solar Tracking Preferred Shares. Generation from this facility is sold under PPAs with high-quality counterparties that terminate between 2032 and 2035. In addition to revenue generated under the PPAs, the projects generate Solar Renewable Energy Credits that expire in 2024.

### Wyoming

The 140 MW Wyoming wind farm is comprised of 78 1.8 MW Vestas V80 wind turbines on 67-metre towers, and is located near Evanston, Wyoming. It began commercial operations in December 2003. The Company owns the economic interest in this facility through its ownership of the Wyoming Wind Tracking Preferred Shares. Generation from this facility is sold under a PPA with an investment grade counterparty which terminates in 2028.

## Economic Interest in Australian Assets

We acquired an economic interest in the portfolio of Australian Assets from TransAlta on May 7, 2015. The portfolio consists of 450 MW of power generation from six operating assets and a 270 km gas pipeline. The assets are located in Western Australia and are operated by TransAlta. We acquired the economic interest in all of the Australian Assets from a subsidiary of TransAlta in consideration for a payment equal to \$1.78 billion. We acquired our economic interest in the Australian Assets through our subscription of Class A Tracking Preferred Shares (the "Australian Tracking Preferred Shares") in the capital of TA Energy. See "*Business of TransAlta Renewables – Investment Agreement – Australian Assets*".

The following table summarizes our economic interest in the Australia business:

Facility Name	Province/ State	Ownership (%)	Net Capacity Ownership Interest (MW) <sup>(1)</sup>	Commercial Operation Date	Counterparty	Contract Expiry Date
Fortescue River Gas Pipeline <sup>(2)</sup>	WA	43	N/A	2015	Fortescue Metals Group	2035
Parkeston <sup>(2)(3)</sup>	WA	50	55	1996	Newmont Power Pty Ltd.	2026
Southern Cross <sup>(2)(4)</sup>	WA	100	245	1996	BHP Billiton Nickel West Pty Ltd	2023
South Hedland <sup>(2)(5)</sup>	WA	100	150	2017	LTCs <sup>(6)</sup>	2042
<b>Total Australia Net Capacity</b>			<b>450</b>			

### Notes:

- MW are net amounts and are rounded to the nearest whole number.
- The Company holds an economic interest in this facility, and does not own this facility directly or indirectly.
- Plant contracted to October 2026 with early termination options beginning in 2021.
- Comprised of four facilities.
- Plant was commissioned in July 2017.
- Long-Term Contracts with two counterparties: Horizon Power and FMG. On November 13, 2017, FMG purported to terminate the PPA for South Hedland. See "*General Development of the Business - Three-Year History - 2017 - Status of Commercial Operations at South Hedland facility*".

### Fortescue River Gas Pipeline

In 2014, TransAlta established the Fortescue River Gas Pipeline joint venture with DBP Development Group. The joint venture (of which TransAlta is a 43 per cent partner) was successfully awarded the contract to design, build, own and operate the 270 km Fortescue River Gas Pipeline to deliver natural gas to the Solomon facility. The pipeline was completed in the first quarter of 2015 and operates under a take-or-pay gas transport agreement with a subsidiary of FMG for an initial term of 20 years. The 16-inch diameter pipeline has an initial free-flow capacity of 64 terajoules (TJ) per day. We own the economic interest in this facility through our ownership of the Australian Tracking Preferred Shares. Under the terms of the gas tariff agreement, FMG has the option to purchase the Fortescue River Gas Pipeline from the joint venture any time following March 20, 2020. See "*Business of TransAlta Renewables – Investment Agreement – Australian Assets*".

### Parkeston

The Parkeston plant is a 110 MW dual-fuel natural gas and diesel fired power station, which TransAlta owns in partnership through a 50/50 joint venture with NP Kalgoorlie Pty Ltd., a subsidiary of Newmont Australia Limited. The Parkeston facility primarily supplies energy to Kalgoorlie Consolidated Gold Mines and the initial supply contract ended in 2016. The plant was re-contracted effective November 1, 2016, and the agreement extended the previous contract to October 2026, with options for early termination available to either party beginning in 2021. Any merchant capacity and energy is sold into Western Australia's Wholesale Electricity Market. We own the economic interest in this facility through our ownership of the Australian Tracking Preferred Shares. See "*Business of TransAlta Renewables – Investment Agreement – Australian Assets*".

### Southern Cross

Southern Cross Energy is composed of four natural-gas and diesel-fired generation facilities with a combined capacity of 245 MW. Southern Cross Energy sells its output pursuant to a contract with BHP Billiton Nickel West that was renewed

in October 2013 for 10 years. We own the economic interest in this facility through our ownership of the Australian Tracking Preferred Shares. See "*Business of TransAlta Renewables – Investment Agreement – Australian Assets*".

### **South Hedland**

In 2014, TransAlta was selected as the successful bidder to design, build, own and operate a 150 MW combined cycle power station near South Hedland, Western Australia. The South Hedland plant was fully commissioned on July 28, 2017. The plant is fully contracted with two customers for a 25-year term. The majority of the plant's capacity is contracted to Horizon Power, the state-owned electricity supplier in the region. The second customer is the port operations of FMG. On November 13, 2017, FMG issued a notice purporting to terminate the South Hedland PPA. TransAlta's view is that the purported termination is invalid and continues to invoice FMG for the contracted capacity. TransAlta commenced proceedings in the Supreme Court of Western Australia on December 4, 2017 to recover amounts invoiced under the South Hedland PPA. The proceedings are currently ongoing and the case is scheduled to be before the courts in mid-2020. See "*General Development of the Business – Three-Year History – 2017 – Status of Commercial Operations at South Hedland Facility*" and "*Legal Proceedings and Regulatory Actions*" in this AIF. We own the economic interest in this facility through our ownership of the Australian Tracking Preferred Shares. See "*Business of TransAlta Renewables – Investment Agreement – Australian Assets*".

### *Investment Agreement – Australian Assets*

On March 23, 2015, we entered into an investment agreement with TransAlta (the "Australia Investment Agreement") pursuant to which, among other things, we acquired at closing on May 7, 2015, Mandatory Redeemable Preferred Shares and Australian Tracking Preferred Shares providing us with an economic interest based on the cash flows broadly equal to the underlying net distributable profits of TEA. TEA is a wholly owned subsidiary of TransAlta that, directly and indirectly, owns the Australian Assets. The Australian Tracking Preferred Shares were issued to the Company by TA Energy. TransAlta received net cash proceeds of \$216.9 million as well as approximately \$1,067 million as consideration through a combination of Common Shares and Class B Shares. On August 1, 2017, the 26.1 million Class B Shares converted into 264 million Common Shares.

Pursuant to the terms of the Australian Tracking Preferred Shares, the Company is entitled to receive, in priority to the common shares in the capital of TA Energy, quarterly preferential cash dividends ("Australia Dividend Payments"). The Australian Tracking Preferred Shares have no residual right to participate in the earnings of TA Energy.

In the event of the liquidation, dissolution or winding up of TA Energy or any other distribution of the assets of TA Energy among its shareholders for the purpose of winding up its affairs, we will be entitled, subject to applicable law, to receive from TA Energy as the sole holder of Australian Tracking Preferred Shares, before any distribution by TA Energy to the holders of its common shares or any other shares ranking junior to the Australian Tracking Preferred Shares, an amount equal to the fair market value of the Australian Assets.

As a holder of Australian Tracking Preferred Shares, we are not entitled to receive notice of or to attend any meeting of the shareholders of TA Energy and are not entitled to vote at any such meeting unless and until TA Energy fails to pay, in the aggregate, four Australia Dividend Payments on the dates when the same should be paid, whether or not consecutive, and whether or not such dividends have been declared and whether or not there are any moneys of TA Energy properly applicable to the payment of dividends. Thereafter, but only for so long as any Australia Dividend Payments remain in arrears, we will, as the sole holders of Australian Tracking Preferred Shares, be entitled to elect 30 per cent of the members of the board of directors of TA Energy (subject to rounding up to the nearest whole number).

The Australia Investment Agreement provides that, among other things, for so long as the Company owns Australian Tracking Preferred Shares: (a) TEA may not (i) amend its constituting documents in a manner materially adverse to the consideration to be received by TransAlta Renewables, (ii) split, combine or reclassify any of its shares, or (iii) enter into or modify any contract, agreement, commitment or arrangement with respect to any of the foregoing; (b) TEA will operate, maintain and preserve the Australian Assets and conduct its business in the ordinary and usual course; and (c) TEA will not (i) enter into, cancel or amend any agreement or commitment that is material to the Australian Assets, or (ii) sell, encumber, dispose, surrender or abandon any of the Australian Assets, other than as permitted. The Australian Investment Agreement also provides us with a right of first offer on select potential growth initiatives in Australia and certain protections in relation to exchange rates.

### *TransAlta Power Purchase and Sale Arrangements*

On August 9, 2013, the Merchant Subsidiaries entered into a TransAlta PPA providing for the purchase by TransAlta, for a fixed price, of all of the power produced by the facilities whose power had previously been sold on a merchant basis (a "Merchant Facility").

The price payable by TransAlta for output under each TransAlta PPA was initially set at \$30.00/MWh for wind facilities and \$45.00/MWh for hydroelectric facilities, which amounts are adjusted annually for changes in the Consumer Price

Index ("CPI"). The CPI adjusted prices for 2019 were \$32.88 per MWh for wind facilities and \$49.33 per MWh for hydroelectric facilities.

Under the terms of each TransAlta PPA, the applicable Merchant Subsidiary agrees to use its reasonable commercial efforts to maximize the amount of energy generated at its Merchant Facilities over the term of the applicable TransAlta PPA; however, the Merchant Subsidiary is under no obligation to deliver any specified amount of energy and in no event will any penalties or curtailment payments be payable under the applicable TransAlta PPA. The Merchant Subsidiaries assume all operating and generating risk and TransAlta will only be required to purchase power that is actually produced.

Each Merchant Subsidiary retains all the environmental attributes (including any RECs) derived from or arising in connection with its Merchant Facilities; however, TransAlta is obligated to use reasonable commercial efforts to sell those environmental attributes for and on behalf of such Merchant Subsidiary in a timely manner as and when they come into existence, with the full proceeds in connection with any such sales being for the benefit of the applicable Merchant Subsidiary.

TransAlta has dispatch rights for wind and hydroelectric output produced by the Merchant Subsidiaries under the applicable TransAlta PPAs. Dispatchable Wind Rules came into effect in Alberta on April 1, 2015, as established by the Alberta Electric System Operator ("AESO"). As part of the Dispatchable Wind Rule changes, pool participants for wind-aggregated generating facilities are able to voluntarily offer into the energy market merit order at prices greater than \$0.00/MWh. TransAlta has dispatch rights for wind output produced by the Merchant Subsidiaries under the applicable TransAlta PPAs. TransAlta is obligated to pay for available output not dispatched by TransAlta in the event that power generation from qualified wind facilities is dispatched. The TransAlta PPAs provide that any change to the electricity markets that has a significant effect on either TransAlta or the Company will cause the parties to engage in good faith negotiations to amend the TransAlta PPAs as required to ensure that the underlying principles of the TransAlta PPAs are reflected thereunder.

TransAlta PPA has a term of 20 years or end of asset life, where end of asset life is less than 20 years. Each TransAlta PPA may be terminated by: (a) the mutual agreement of the parties; (b) the Merchant Subsidiary upon the occurrence of a material default by TransAlta; and (c) TransAlta (i) upon the occurrence of a material default by the Merchant Subsidiary; (ii) upon a "Change of Control" of the Company, being the acquisition by any person or group of persons acting jointly and in concert (other than TransAlta and its affiliates) of more than 50 per cent of the issued and outstanding Common Shares; or (iii) upon a "Change of Control" of the Merchant Subsidiary, being the acquisition by any person or group of persons acting jointly and in concert (other than the Company and its affiliates) of more than 50 per cent of the issued and outstanding voting securities of the Merchant Subsidiary.

Each of the Merchant Subsidiaries and, to the knowledge of TransAlta Renewables, TransAlta, is in compliance with their obligations under the TransAlta PPA and no material default has occurred.

### *Power Sales, Grants and Incentives*

There are a number of means of generating revenue and utilizing incentives across the power generation industry. In the renewable generation sector, government support to promote investment into renewable power generation sources has been evidenced through long-term PPAs or alternative contracts such as those pursuant to the feed-in-tariff programs, a government policy mechanism used to support the adoption of renewable power. For facilities not subject to a PPA, the facility's owner may elect to use derivative contracts, such as power hedge contracts, to secure a fixed price for its power production or, alternatively, sell its production at prevailing market prices.

In addition to government-supported PPAs, additional incentives supported by governments have been used to stimulate investment in renewable power. These incentives have typically included incentive payments based on generation from renewable power facilities, capital cost grants, tax credits and environmental attributes to meet certain emission standards.

Governments may provide tax incentives or cash grants to promote and facilitate investment in renewable power. In Canada, several federal and provincial programs have been commissioned to promote the development of renewable power, such as the WPPI and ecoENERGY programs (each as described below), as well as tax credits such as accelerated depreciation incentives which enable renewable power producers to deduct the capital cost of these assets at a rate faster than accounting depreciation, which benefits a project's economics.

### **WPPI and ecoENERGY**

The Wind Power Production Incentive ("WPPI") program is a Canadian federal government program that provides incentive payments to producers of wind energy for eligible wind projects for the first 10 years of the project's operating life. The Canadian government initially targeted \$920 million in incentives over 15 years to develop 4.0 GW of wind power generation, equivalent to the amount of power needed by approximately one million average Canadian homes.

Under the program, wind power projects were eligible to receive an incentive payment of between \$0.008/kWh and \$0.012/kWh for the first 10 years of operation, depending upon the commissioning date. The WPPI program was replaced by the ecoENERGY program in 2007, but this change did not affect the existing entitlements of projects receiving payment under the original WPPI program.

On January 19, 2007, the Canadian federal government announced the \$1.48 billion ecoENERGY program to encourage the development of clean power generation projects including wind, small hydro, biomass, solar, geothermal, tidal and wave technologies that generate very low emissions in Canada. An incentive of \$0.01/kWh for up to 10 years was offered to eligible projects with the program intending to support 4.0 GW of new renewable energy capacity. No new contribution agreements were signed after March 31, 2011, but ecoENERGY payments will carry on for existing eligible projects until March 31, 2021.

The following facilities currently receive payments under the ecoENERGY program.

#### **Assets of the Company Receiving ecoENERGY Payments**

- Ardenville
- Kent Hills 2
- Bone Creek

#### **Accelerated depreciation**

The Canadian federal government provides accelerated depreciation for tax purposes for certain renewable power generation assets that meet specific criteria, as well as certain high-efficiency cogeneration equipment. Class 43.1 was introduced in 1994 and provides a 30 per cent declining balance accelerated capital cost allowance rate for renewable assets. Class 43.2 was introduced in 2005 and provides a 50 per cent declining balance accelerated capital cost allowance rate for renewable assets acquired before 2025. Additionally, in Canada, certain expenses incurred by independent power producers ("IPPs") during the pre-production development phase may qualify as Canadian Renewable and Conservation Expense, which provides a full deduction in the year incurred for the qualifying expenditures.

In November 2018, the federal Minister of Finance introduced the Accelerated Investment Incentive, which will provide an immediate write-off of newly-acquired clean energy equipment acquired after November 20, 2018, and available for use before 2028. Clean energy equipment includes Class 43.1 and Class 43.2 additions. The proposal was included in the 2019 federal budget issued in March 2019 and the bill was passed into law in June 2019.

#### **Carbon credits**

In 2007, the *Specified Gas Emitters Regulation* ("SGER"), a GHG regulatory scheme, was launched by the Government of Alberta. The SGER regulated industrial facilities that emit GHGs above a specified threshold. Under SGER, some renewable generating facilities in Alberta were able to generate offset credits for a period of up to 13 years that could be used by compliance entities to reduce the cost of meeting their carbon obligations as offsets trade at prices below compliance costs.

On January 1, 2018, the Alberta government transitioned from the SGER to the Carbon Competitiveness Incentives Regulation ("CCIR"). Under the CCIR, the regulatory compliance moved from a facility-specific compliance standard to a product/sectoral performance compliance standard. All renewable assets that received offset crediting under the SGER continued to receive credits under CCIR on a one-to-one basis. All other renewables that did not receive credits under SGER were able to opt into the CCIR and receive EPCs up to the electricity sector performance standard in perpetuity. Offsets and EPCs are equal carbon credits expressed in units of tCO<sub>2</sub>e that can be used for compliance purposes.

The new Alberta government enacted legislation to move from the CCIR to TIER regulations. TIER replaced CCIR on January 1, 2020. For the electricity sector, there were negligible changes between CCIR and TIER with renewable facilities continuing to generate both offset credits and EPCs.

Facilities based in Alberta that generate carbon offset credits under TIER are listed immediately below. See also "*Business of TransAlta Renewables - Ongoing and Recently Passed Environmental Legislation - Alberta*".

#### **Assets of the Company Generating Carbon Offset Credits**

- Ardenville
- Blue Trail
- Summerview 2

Once a wind project's entitlement to offset crediting ends after 13 years from the date of commercial operation, the project can opt in under TIER and generate EPCs for the remainder of its operational life. We anticipate revenues generated under the TIER system to be similar to historical amounts under the prior carbon offset credits. The price for EPCs are expected to increase along with any increase in carbon price.

Offset projects generate credits at 0.59 tCO<sub>2</sub>e/MWh while opt-in renewables generate EPCs at the electricity benchmark of 0.37 tCO<sub>2</sub>e/MWh.

Facilities based in Alberta that generate EPCs under TIER are listed immediately below. See "*Business of TransAlta Renewables – Ongoing and Recently Passed Environmental Legislation – Alberta*".

#### **Assets of the Company Generating Carbon Credits under CCIR**

- Castle River
- Cowley North
- Sinnott
- Soderghen

#### **Renewable energy credit sales**

RECs may be used for a buyer's voluntary or mandatory compliance needs, and are typically subject to independent verification against predetermined criteria that varies by the applicable REC program. Value is generally determined by vintage (year of creation), eligibility in compliance regimes, technology/method used to create the credit, and other region/buyer-specific parameters. Generally, the stricter the criteria for creating an REC, the higher the obtainable price for the REC. RECs may be bundled for sale with power in a PPA or other bilateral contract, or they may be exchanged in isolation.

Two of our assets generate merchant RECs that we sell into the Renewable Portfolio Standard ("RPS") market: Le Nordais in Québec and Mass Solar in Massachusetts. Both assets generate compliance-level RECs. Le Nordais qualifies to sell Class 1 RECs into the New England RPS markets. Mass Solar's facilities generate Solar RECs that sell at a premium for the first 10 years past commercial operation and afterwards the RECs generated can be sold as Class 1 RECs in the Massachusetts RPS and the rest of New England RPS market.

#### ***Competitive Environment***

Power generation is an industry in the midst of an exciting transformation and the demand for electricity is expected to grow significantly over the long term. In addition to the need to keep pace with ongoing demand growth for electricity, there are several key factors driving the need for significant investment in new generating capacity going forward. First, coal-based generation is being retired, these retirements are being driven by asset age as well as government policy that places a price on emissions and, in some cases, mandates the retirement of these assets. Second, government policies that impose costs or provide incentives for lower-emission technologies are creating opportunities for renewable generation technologies. These opportunities are coinciding with a significant decline in the installed costs of both wind and solar generation and as a result these technologies now account for the majority of the new generating capacity added to many of the world's electricity grids. Third, electrification is seen as one of the most effective levers to reduce GHG emissions in many sectors such as transportation. As these sectors and others continue to shift to electricity as their primary energy source we will see accelerating demand growth for our product. We expect that renewable power generation will be one of the fastest growing sources of power generation in both Canada and the US, a forecast that is well supported by recent trends and announcements.

We are ready for this transformation. We have the skills, experience and scale to compete for additional assets within our target markets. Today, we are one of the largest publicly traded renewable power generation companies in Canada.

#### **Canadian power industry**

The Canadian power generation market is largely comprised of provincially distinct markets, with wide variance in terms of electricity supply mix among the provinces and territories. Each province has developed a power sector driven by its unique economic, natural resource, regulatory and geographic makeup.

The abundance of hydroelectric resources in British Columbia, Manitoba, Québec and Newfoundland and Labrador has contributed to a generation fleet driven primarily by hydroelectric power in those provinces. Alberta, Nova Scotia and Saskatchewan have historically relied more heavily on coal power, but this is expected to change dramatically by 2030 due to federal and provincial regulations. Ontario and New Brunswick have relatively diversified generation fleets, relying on nuclear, thermal, wind and hydroelectric power. Although generation fuel types are diversified, all markets

have experienced significant growth in renewable energy capacity including wind, solar and bio-energy, and this growth in renewable power capacity is expected to continue.

Wind generation is expected to account for the majority of the increase above. The Canadian Energy Regulator ("CER") predicts an additional 10 GW of wind capacity will be added during the forecast period to 2040. This growth trend is already well underway. According to the Canadian Wind Energy Association, more wind generation was built in Canada between 2008 and 2018 than any other generating technology. Canada is the ninth largest producer of wind energy in the world, with installed capacity of roughly 13.8 GW as of December 2019. Wind power supplies roughly six per cent of the total electricity demand in Canada.

Canada is a world leader in hydroelectric power generation and the CER forecasts that hydro will continue as a principal source of power generation through 2040. Today, hydroelectricity accounts for over 60 per cent of the total annual electricity production in Canada and the annual production is expected to increase from 400 TWh in 2019 to 440 TWh in 2040.

### **US power industry**

The U.S. Energy Information Administration (the "EIA") is projecting overall electricity generation to increase by approximately 18 per cent between 2019 and 2040, with renewable energy and natural gas representing the fastest growing segments of power generation. Natural-gas-fired production is expected to increase by 33 per cent and renewables generation by 78 per cent during the period. According to the EIA, renewable energy generation in the US currently accounts for 18 per cent of total power generation. The contribution of renewables to total generation in the electric power sector varies widely at the state level due to geographical limitations, availability of resources, and government policy considerations.

We believe that renewable energy production in the US will continue to grow, with such growth being driven by the continuing increase in demand for electricity, the retirement of coal and nuclear power generation facilities, the implementation of renewable portfolio standards in 29 states as well as other government incentive programs and the continuation of such programs, and improvements in the cost and competitiveness of renewable energy generation technologies. In addition, a significant market has developed for the addition of new wind and solar generating assets directly contracted to corporate customers. This market is large, and the first half of 2019 saw the announcement of 43 new contracts accounting for over four GW of generating capacity. As companies and investors increase the level of attention and importance on environmental, social and governance measures we expect this market to continue to grow.

### **Australia power industry**

The Australian electricity industry is divided amongst three distinct markets, the National Electricity Market ("NEM") in the East, the Wholesale Electricity Market ("WEM") in Western Australia and the Northern Territory Electricity Market. In addition, there is a significant market for "off-grid" generation supporting remote communities and remote mining operations, particularly in Western Australia, Queensland and the Northern Territory.

The NEM is the largest market in Australia, currently with over 53 GW of installed capacity. The installed capacity based on coal generation is about 23 GW and much of this is expected to retire over the next decade due to the age of these assets. Renewables penetration, both wind and solar, has grown strongly in this market and that is expected to continue. The federal Department of the Environment and Energy predicts an overall renewables penetration of 50% in the NEM and 55% in the WEM by 2030.

Our business today is solely in Western Australia and focused on the large remote mining industry in that region. The primary exports from Western Australia are iron ore, nickel and gold. Commodity prices are currently relatively strong; the nickel industry is experiencing an increase in demand to support both steel and battery manufacturers. Iron ore exports are forecast to rise slightly, driven by large-scale producers ramping up long term production targets to maintain revenue in a lower price environment. Remote mining operations are also beginning to explore options to add renewable generation to their sites in an effort to reduce the amount of gas and diesel required in these operations. We expect this trend to continue and to create opportunities for our business in Western Australia.

### *Competitive Strengths*

We believe that we are well positioned to achieve our business strategy due to our competitive strengths, which include the following:

#### **Wind generation**

We are one of the largest owners of wind generation in Canada. Our management team has developed key relationships with customers and suppliers that provide a competitive advantage in the development, operations and marketing of wind generation.

### **Significant scale and diversified portfolio**

Our asset platform is diversified in terms of geography, generation and counterparties. We own 19 wind facilities, 13 hydroelectric facilities and one gas facility with an ownership interest of approximately 1,747 MW of owned capacity, located in the provinces of British Columbia, Alberta, Ontario, Québec and New Brunswick in Canada, an economic interest in approximately 780 MW of owned capacity located in Wyoming, Minnesota, Massachusetts, New Hampshire and Pennsylvania and Western Australia comprised of gas, wind and solar, as well as an economic interest in a natural gas pipeline in Western Australia. This scale and diversification provides cash flow stability and reduces risk associated with operating facilities in a single jurisdiction and fuel type.

### **Established operating history**

Our assets have an established operating and performance history. The assets have been in operation from two months to 29 years, with the weighted average years of operation by capacity being 14.7 years, which includes facilities in which we own an economic interest. Furthermore, the average availability of the wind and solar assets for the year ended December 31, 2019, was 95.0 per cent compared to 95.4 per cent for the year ended December 31, 2018. With this history of generation production, we are better able to predict future production.

### **Strategic sponsorship with industry leader and experienced operator**

TransAlta, our manager and operator, and its predecessors, have been engaged in the development, production and sale of electric energy since 1911, with its first operations being in hydroelectric generation. TransAlta is among Canada's largest non-regulated electricity generation and energy marketing companies with approximately 9,000 MW of installed generating capacity. TransAlta has been operating hydroelectric facilities for more than 100 years and was the first company to own and operate more than 1,000 net MW of wind generation capacity in Canada. TransAlta has significantly grown its renewables business from approximately 800 net MW in 2000 to almost 2,400 MW of installed generation as at December 31, 2019 (including the assets in TransAlta Renewables for this purpose).

### **Growth in target markets and technologies**

We anticipate a significant need for investment in power generation infrastructure in Canada and the US, principally driven by the replacement of aging facilities and an anticipated increase in industrial activity and population growth. In addition, we anticipate that clean power generation sources, including both renewables and natural gas facilities, will experience the largest percentage growth, as jurisdictions continue to establish environmental-based production targets and other infrastructure assets. We believe that we are well positioned to pursue consolidation opportunities, given our scale and financial flexibility, as well as our relationship with TransAlta.

### **Additional markets and technologies**

While we presently intend to focus primarily on Canada, the US and Australia, we may consider expanding our operations into new markets. We may also explore growth opportunities in other forms of clean power generation, including geothermal and biomass powered facilities, as well as other power related infrastructure assets, such as transmission and the possibility of energy storage to complement our renewable assets. Our manager and operator, TransAlta, has experience in many of these clean electricity generating technologies and is exploring the conversion of coal to gas and hydro expansion plans.

### **Stable cash flow base**

Through the use of PPAs, nearly all of our capacity is currently contracted over the next six years. Our PPAs have a weighted average remaining term by capacity of approximately 11 years. The net revenue received under these contractual arrangements helps to minimize short-term revenue fluctuations due to the variable price of electricity.

### **Management team**

TransAlta provides management, administrative and operational services to the Company. The members of TransAlta's management team who are responsible for managing our operations have extensive experience in the power generation business. The employees of TransAlta providing management, administrative and operational services at our facilities are the same individuals who perform such services for TransAlta.

### **Environment**

We are a recognized leader in sustainable development and we have taken early preventative action on a number of environmental fronts in advance of regulatory requirements and policy changes.



## *Seasonality and Cyclical*

The business of the Company is cyclical due to: (i) the nature of electricity and the limited storage capacity of the Company; and (ii) the nature of wind, solar and run-of-river hydroelectric resources, which fluctuate based on both seasonal patterns and annual weather variation.

Typically, run-of-river hydroelectric facilities and solar facilities generate most of their electricity and revenues during the spring and summer months when the melting snow starts feeding the watersheds and the rivers and the sun is at its highest peak. Inversely, wind speeds are historically greater during the cold winter months when the air density is at its peak. The Company's strategy of technological and geographical diversification reduces the Company's exposure to the variations of any one natural resource in any one region. Since the Company's operations are presently based mainly on power generation from wind, its financial results in any one quarter may not, however, be representative of all quarters. See "Risk Factors".

## *Environmental Risk Management*

We are subject to environmental regulation governing the construction and operation of our asset base, which requires us to obtain operating licenses and permits. To ensure compliance, we work closely with local and regional authorities to address all environmental matters and to comply with licensing and permitting requirements.

### **Ongoing and Recently Passed Environmental Legislation**

Changes in current environmental legislation have, and will continue to have, an impact upon our operations and our business. The regulatory framework applicable to electricity generation varies between regions. Over the past few decades, a number of regions have restructured their power markets, allowing power to be generated by IPPs. Generally, there has been broad support from governments to facilitate growth in renewable power generation through the development of incentives and long-term revenue arrangements designed to encourage the adoption of renewable power.

### **Canadian Federal Government**

#### *Federal Carbon Pricing*

On June 21, 2018, the Canadian federal *Greenhouse Gas Pollution Pricing Act* ("GGPPA") came into force. Under the GGPPA, the Canadian federal government implemented a national price on GHG emissions. The price began at \$20 per tonne of carbon dioxide equivalent (CO<sub>2</sub>e) emitted in 2019, rising by \$10 per year until reaching \$50 per tonne in 2022.

On January 1, 2019, the GGPPA's backstop mechanisms came into force in provinces and territories that did not have an independent carbon pricing program or where the existing program was not deemed equivalent to the federal system. The backstop mechanism has two components: the federal pollution pricing fuel charge ("Carbon Tax") and the regulation for large emitters called the Output Based Pricing System ("OBPS"). The Carbon Tax sets a carbon price per tonne of GHG emissions related to transportation fuels, heating fuels and other small emission sources. Provinces and territories captured by the OBPS include Ontario, Manitoba, New Brunswick, Saskatchewan, Prince Edward Island, Yukon and Nunavut. Provinces and territories subject to the Carbon Tax include Alberta, Ontario, Manitoba, Saskatchewan, Prince Edward Island, Yukon and Nunavut.

The OBPS regulates large emitters' carbon intensity by setting a sector performance standard (benchmark) of GHG emissions per unit of production for electricity generators (tCO<sub>2</sub>e/MWh). Emitters exceeding the benchmark generate carbon obligations and those emitters that perform below the benchmark generate EPCs. Emitters can meet their obligations by reducing their emission intensity, buying carbon credits from others (offsets or EPC) or making compliance payments to the government.

Other jurisdictions that were compliant with the GGPPA did not have the backstop mechanism imposed in 2019. These jurisdictions must file and have their carbon pricing programs approved annually. Over future annual compliance periods, if parts or all of a province's GHG regulations fall out of compliance with the GGPPA, the federal government will impose its backstop mechanisms.

#### *Federal Pollution Pricing Fuel Charge*

On October 31, 2018, the Ontario government passed the *Cap and Trade Cancellation Act* (Ontario) repealing its carbon levy. The Canadian federal government replaced the repealed Ontario carbon levy with the Federal Pollution Pricing Fuel Charge (the "Carbon Tax") on January 1, 2019. Comparably, on May 30, 2019, the Alberta government repealed the Alberta provincial carbon tax and the *Climate Leadership Act*. As a result, the Canadian federal government implemented the Carbon Tax in Alberta effective January 1, 2020.

Alberta and Ontario large-emitter-regulations-covered facilities are exempt from the Carbon Tax. The Carbon Tax only applies to transportation and heating fuels used at renewables facilities and has a negligible cost impact for the Company.

#### *Gas Regulation*

On December 18, 2018, the federal government published the *Regulations Limiting Carbon Dioxide Emissions from Natural Gas-fired Generation of Electricity*. Under the regulations, new and significantly modified natural-gas-fired electricity facilities with a capacity greater than 150 MW must meet a standard of 0.420 tCO<sub>2</sub>e per megawatt hour ("tCO<sub>2</sub>e/MWh") to operate. For units with a capacity between 150 MW and 25 MW, their standard was set at 0.550 tCO<sub>2</sub>e/MWh. For units of 25 MW or less, there is no standard.

Under the regulations, coal-to-gas conversions will also eventually have to meet a standard of 0.420 tCO<sub>2</sub>e/MWh. If the first year performance test after conversion meets certain emission standards it will not have to meet the 0.420 tCO<sub>2</sub>e/MWh standard for several additional years past the end of its useful life.

Change of law provisions in the Sarnia contracts with customers should ensure the pass-through of increased carbon costs of natural gas to customers.

#### *Clean Fuel Standard*

In 2016, the Canadian federal government announced plans to consult on the development of a Clean Fuel Standard ("CFS") to reduce Canada's greenhouse gas emissions through the increased use of lower carbon fuels, energy sources and technologies. The objective of the regulation is to achieve 30 million metric tonnes of annual reductions in GHG emissions by 2030. The CFS will establish life-cycle carbon intensity requirements separately for liquid, gaseous and solid fuels that are used in transportation, industry and buildings. Under the proposed policy, coal combusted at facilities that are covered by coal-fired electricity regulations will be exempt from the regulation. Natural gas used for electricity production is currently expected to be included under the gaseous stream.

Consultation on the gaseous stream commenced in 2019 and will continue into 2020. Publication of the draft regulations for the gaseous stream will occur in late 2020 with final regulations expected in 2021. The gaseous stream is currently expected to come into force by 2023. TransAlta continues to be engaged in the consultation process.

If a CFS standard is adopted for natural gas, the compliance requirements for natural gas suppliers will increase the input costs of natural gas. Change in law provisions within Sarnia's contracts should result in no material revenue impacts to the Company.

### **Alberta**

#### *Large Emitter Greenhouse Gas Regulations*

On January 1, 2018, the Alberta government transitioned from *Specified Gas Emitters Regulation* ("SGER") to the *Carbon Competitiveness Incentive Regulation* ("CCIR"). Under the CCIR, the regulatory compliance moved from a facility-specific compliance standard to a product or sector performance compliance standard. CCIR price was \$30/tCO<sub>2</sub>e in 2019. The electricity sector performance standard was set at 0.37 tCO<sub>2</sub>e/MWh and set to decline annually. All renewable assets that received crediting under the SGER continued to receive credits under CCIR on a one-to-one basis. All other renewable assets that did not receive credits under the previous standard that opted in to the CCIR received carbon crediting up to the electricity sector performance standard under the CCIR until the end of 2019. Once the wind projects' crediting standard under SGER protocol ends, these projects will also be able to opt in to the CCIR system and be credited up to the performance standard.

On April 16, 2019, the United Conservative Party ("UCP") won the Alberta provincial election with a majority government. The UCP committed to move from the CCIR to TIER. TIER replaced CCIR effective January 1, 2020. For the electricity sector, there were negligible changes between CCIR and TIER with renewable facilities continuing to receive carbon crediting. The carbon prices for TIER in 2020 will remain at \$30/tCO<sub>2</sub>e but Alberta has not yet confirmed future price increases in line with federal requirements. The performance standard benchmark remained at 0.37 tCO<sub>2</sub>e/MWh but will remain constant versus tightening over time. A review of TIER by the Government of Alberta is not expected until 2023.

Facilities with emissions above the set benchmark will need to comply with TIER by: 1) paying into the TIER Fund; 2) making reductions at their facility; 3) remitting EPCs from other facilities; or 4) remitting offset credits.

As required by the GGPPA, the Alberta government filed the TIER program details with the Canadian federal government. TIER was passed by the Alberta government on October 29, 2019, and on December 6, 2019, the Canadian federal government accepted the TIER regulation as compliant with the GGPPA for 2020. Our renewable facilities generate carbon credits (offsets and EPCs) under TIER that are marketed to emitters to help mitigate their carbon obligations.

## **British Columbia**

Beginning April 1, 2018, BC increased its carbon tax price to \$35/tCO<sub>2</sub>e and committed to raise the price \$5 per year until it reaches \$50 per tonne in 2021. The tax has a negligible cost impact for the Company due to the nature of our assets in BC.

## **Ontario**

On October 31, 2018, the Ontario Government passed the *Cap and Trade Cancellation Act* (Ontario). This Act effectively removed all existing provincial carbon emission regulations and costs on large emitters.

### *Large Greenhouse Gas Emitters Regulation*

The Canadian federal GGPPA requires provinces to have GHG regulations and prices in place that align with the federal GGPPA. On October 23, 2018, the federal government announced that Ontario large emitters would be subject to the federal backstop OBPS regulation as of January 1, 2020. All covered industry facilities with annual emissions over 50,000 tCO<sub>2</sub>e are automatically covered with an opt-in provision for those emitters between 10,000 and 50,000 tCO<sub>2</sub>e annually. Ontario large emitters are currently subject to the federal backstop OBPS regulation.

On July 4, 2019, the Government of Ontario released the final regulations for the provincial Greenhouse Gas Emissions Performance Standards ("EPS"). The EPS establishes GHG emission limits on covered facilities. Large emitters generating over 50,000 tCO<sub>2</sub>e or more per year will be covered with an opt-in provision for those emitters between 10,000 and 50,000 tCO<sub>2</sub>e annually. The carbon emissions limit for electricity is set at 0.42 tCO<sub>2</sub>e/MWh. The program also provides a method that accounts for the carbon efficiency of cogeneration units.

Facilities with emissions above the set reduction requirements can comply by: 1) buying excess emission units from the regulator; 2) making reductions at their facility; or 3) using emission performance units generated by facilities emitting below their emission intensity limit. The first compliance period under the EPS will begin on January 1 in the year in which Ontario is removed from the list of provinces to which the federal OBPS applies. Ontario has submitted the EPS for federal review. Most carbon costs at our Sarnia facility flow through to our customer counterparties due to change in law provisions within our customer contracts.

## **New Hampshire (ISO-NE)**

The New Hampshire market has an RPS, is part of the New England REC market and is also a partner in the Regional Greenhouse Gas Initiative - a carbon cap and trade program. However, Antrim wind farm has long-term contracts in place for its energy and environmental attributes plus long-term capacity commitments. As a result, state and regional environmental and market regulations and policy will have an immaterial impact on revenues.

## **Massachusetts**

The Solar Renewable Electricity Credit I ("SREC I") program carved out from Massachusetts' RPS an initial quantity of 400 MW from small solar facilities of 10 MW or less. The initial SREC I program size was expanded and then replaced by a lower value SREC II program. In 2018, the solar incentive program evolved into the current Solar Massachusetts Renewable Target ("SMART") Program that further reduced the incentive levels. Under the SMART program, the value of the solar REC related credits have been further reduced by reducing the compliance cost of not meeting these additional solar purchase requirements.

The initial SREC I program's volume target was achieved, and qualified projects under SREC I continue to generate SREC I credits for their first 10 years post-COD. Post SREC I crediting facilities transition to generating Class 1 RECs under the Massachusetts RPS for the remainder of their operational life.

Under Massachusetts' net metering program, qualified facilities connect with the local utility and generate net metering credits. Net metering credits offset the load customer's delivery, supply and customer charges and can be sold to customers from remote or on-site qualifying facilities. In 2016, the net metering program was updated to reduce the value of the net metering credits by reducing the cost offset to only cover energy market costs. New projects are impacted once the net metering program volume reached 1,600 MW. TransAlta Renewables and other existing facilities were grandfathered and continue to receive the full original cost offset treatment for a period of 25 years from initial COD.

## **Minnesota (MISO)**

Minnesota has a Renewable Portfolio Standard ("RPS") and allows Michigan RECs to be used by Xcel Energy, other utilities and non-utilities to meet the requirement. The RECs generated by Lakeswind have been transferred to the customer as part of their long-term contract. As a result, the RPS has no impact on project revenues.

## **Pennsylvania (PJM)**

Pennsylvania has an RPS and is linked to the New England REC markets. PJM's capacity market's Minimum Offer Price Rule ("MOPR") is being revised. Big Level wind farm does not sell its RECs to entities regulated by the RPS so it is not subject to MOPR capacity market bid requirements.

## **Wyoming**

Wyoming has no RPS or carbon-related market. Recent private member bills have proposed an increase in the wind tax in the state but fail to move to a substantive vote in the legislature. The support for wind in the state has grown such that there is a very low probability any increased wind tax can pass the legislature.

Wyoming wind farm has long-term contracts for its power and environmental attributes so state environmental and market regulations and policy changes will continue to have an immaterial impact on revenues.

## **Australia**

On December 13, 2014, the Australian government enacted legislation to implement the Emissions Reduction Fund (the "ERF"). The AUD\$2.55 billion ERF is the centrepiece of the Australian government's policy and provides a policy framework to cut emissions by five per cent below 2000 levels by 2020 and 26 to 28 per cent below 2005 emissions by 2030. The ERF's safeguard mechanism, which became effective on July 1, 2016, is designed to ensure emissions reductions purchased by the Australian government through the ERF are not displaced by significant increases in emissions elsewhere in the economy. The ERF and its safeguard mechanism provide incentives to reduce emissions across the Australian economy.

The Australian government has also committed to develop a National Energy Productivity Plan with a target to improve Australia's energy productivity by 40 per cent between 2015 and 2030. The ERF is not expected to have a material impact on our Australian Assets as a result of the Australian Assets being primarily composed of gas-fired generation. In addition, on June 23, 2015, the federal Australian government also reformed the Renewable Energy Target ("RET") scheme. The RET should add at least 33,000 GWh of renewable sources by 2020. This would double the amount of large-scale renewable energy being delivered compared to current levels and result in approximately 23.5 per cent of Australia's electricity generation being sourced from renewable projects.

Under the ERF safeguard mechanism, electricity-sector emissions are capped at 198 MtCO<sub>2</sub>e annually. If the electricity sector emissions exceed this baseline, for each of the following years each facility would need to keep their individual plant's emissions below their plant-specific baseline. The baseline is set at their highest level of operations. The sector baseline has been falling in recent years so individual plants are not subject to the ERF. Further, baselines for existing plants are set at maximum generation ensuring existing generator compliance with the requirements. The ERF is not expected to have a material impact on our Australian assets unless regulations are changed.

### *Market Regulatory Framework*

Below is a description of the regulatory framework of the markets that are material to the Company.

## **Canada**

### *Alberta*

Since January 1, 1996, new generating capacity initiatives in Alberta have been undertaken by IPPs and have been subject to market forces, rather than rate regulation. Power from commercial generation is cleared through a wholesale electricity market. Power is dispatched in accordance with an economic merit order administered by the AESO, based upon offers by generators to sell power. The Market Surveillance Administrator for the Province of Alberta is an independent entity responsible for monitoring and investigating the market behaviour of market participants, including the AESO and the Balancing Pool, and enforcing compliance with all applicable legislation, regulations, and AESO and AUC rules. The AUC oversees electricity industry matters, including new power plant and transmission facilities, the distribution and sale of electricity and retail natural gas. The AUC is also responsible for approving the AESO's rules and for determining penalties and sanctions on any participant found to have contravened market rules.

On July 24, 2019, the Government of Alberta announced that it will not transition to a capacity market and will continue with an energy-only market design. This decision stopped all work on the capacity market design work, which had been underway through the AESO since 2017. The Government's announcement followed a stakeholder consultation and review that found stakeholder support for maintaining the energy-only market based upon its proven track record for providing a reliable supply and affordable electricity for Albertans. The removal of legislative changes to enable the capacity market received royal assent on October 31, 2019. Due to the limited dependable capacity available from intermittent wind resources, the capacity market would have likely had a direct negative impact on wind facilities so the renewed commitment to the energy-only market is positive for wind-generating facilities.

The Minister of Energy further directed Alberta Energy to conduct a policy review on market power and market power mitigation in the energy-only and ancillary services market and directed the AESO to conduct analysis and make recommendations on whether changes are needed to the price floor/ceiling and shortage pricing by July 31, 2020. The outcomes of these reviews are ongoing and no changes to the energy-only market have been proposed to date.

TransAlta Renewables production in Alberta is contractually sold to TransAlta under the TransAlta PPA

#### *British Columbia*

British Columbia's electricity market is dominated by a vertically integrated Crown corporation – BC Hydro. The other provincial utility, FortisBC, has a small service territory in the interior of the province. Electricity is traded with other markets through BC Hydro's trading arm and wholly owned subsidiary Powerex. All electricity utilities are regulated by the British Columbia Utilities Commission.

Under government direction in the late 1990s and early 2000s, BC Hydro established a private power market through several competitive calls for power from IPPs. In recent years, BC Hydro stopped its competitive power calls and contracting with independent power producers and also suspended the smaller Standing Offer Program for small projects below 15 MW pending a review of the program and the completion of the 2018 Integrated Resource Plan (IRP).

BC Hydro is working on its 2018 Integrated Resource Plan ("IRP") to determine its supply needs and future purchase strategies. The 2018 IRP is delayed and may not be delivered for consideration by the BC Utilities Commission until 2021. The 2013 IRP outlined a need to renew contracts with existing independent power facilities but did not identify a need for new IPP power supply and little in the market has changed since the adoption for the 2013 IRP. The 2018 IRP will set BC Hydro's future supply needs. If the 2018 IRP identifies limited future need it may create contract renewal challenges for our assets in BC.

#### *New Brunswick*

In 2004, New Brunswick enacted the *Electricity Act* (New Brunswick), pursuant to which the province's electricity market changed to enable the creation of a competitive environment for eligible wholesale, industrial and municipal utility customers. The *Electricity Act* (New Brunswick) provides that, as generating assets are retired or as additional supply is required, standard service suppliers (i.e. the distribution companies) will procure new supply through the competitive market. This means that any new resources required by New Brunswick Power Distribution Company will be acquired through procurement processes open to both IPPs as well as the New Brunswick Power Generation Company. The province has indicated its decision to increase New Brunswick's Renewable Portfolio Standard to a minimum of 40 per cent of New Brunswick Power Generation Company in-province sales by 2020.

As directed by the 2011 New Brunswick Energy Blueprint and 2014 Integrated Resource Plan, this goal will be accomplished through a combination of eligible renewable energy imports from other provinces and by purchased power from local producers and customers through a variety of programs. In 2015, regulations under the *Electricity Act* (New Brunswick) were amended to support the 40 per cent renewable portfolio standard.

While New Brunswick has procured large commercial wind projects over the last decade, the provincial government has signaled in its 2015 document "Future Development of our Renewable Energy Resources" that the next phase of renewable development will focus on smaller scale projects with a particular emphasis on non-intermittent forms of generation such as wood-based biomass. There should be no immediate impacts on current TransAlta Renewables projects.

#### *Ontario*

Ontario's electricity market is a hybrid market that includes a wholesale spot electricity market as well as regulated prices for certain electricity consumers and long-term contracts for the purchase of power by the IESO. The IESO is the successor organization resulting from the merger of the former IESO and Ontario Power Authority (OPA) in 2015. The Ontario Ministry of Energy, Northern Development and Mines supports the IESO in defining the electricity mix to be procured by the IESO. The IESO has the mandate to undertake long-term planning of the electric system, to procure the electricity generation in that plan and to manage contracts for privately owned generation. The IESO is responsible for managing the Ontario wholesale market and for ensuring the reliability of the electric system in Ontario. The province's electricity sector is regulated by the Ontario Energy Board.

The IESO is currently running a market renewal consultation that includes proposed fundamental changes to the electricity market. These include modifying the energy market, adding a capacity market and improving operability and reliability. The IESO is planning to implement a capacity auction starting in 2020. The IESO is continuing to consult on changes to the energy market that are expected to be implemented in early 2023. As TransAlta Renewable's generation is largely under long-term contract, the impacts should be minimal.

On November 21, 2019, the Minister of Northern Development and Mines issued a directive to the IESO to retain a third party to review existing generation contracts and provide a report back to the government by February 28, 2020. The report is expected to support the IESO's continued work to identify opportunities to reduce electricity costs.

#### *Québec*

The Régie de l'énergie is Québec's regulatory authority with primary jurisdiction over the economic regulation of the electricity sector. Québec is served principally by Hydro-Québec, a government-owned entity with major cost-competitive hydroelectric resources, which has an almost exclusive right to distribute electricity throughout the Province of Québec. Most of Hydro-Québec's generation stations are located at substantial distances from consumer centres. As a result, Québec's transmission system is one of the most extensive and comprehensive in North America, comprising more than 33,000 kilometres of lines. In May 2006, the Québec government released an energy strategy that requires private developers to partner with local communities in order to develop energy projects. In all cases, an agreement with Hydro-Québec on the price of the electricity produced is required before a project can obtain governmental approval. Overall, Hydro-Québec's structure makes new projects difficult but existing projects, such as Le Nordais, that have contracts in place are generally unaffected and are able to re-contract.

#### **US Wholesale Power Market**

The *Federal Power Act* gives FERC rate-making jurisdiction over public utilities engaged in wholesale sales of electricity and the transmission of electricity in interstate commerce. The *Federal Power Act* also provides FERC with the authority to certify and oversee an electric reliability organization that promulgates and enforces mandatory reliability standards applicable to all users, owners and operators of the bulk-power system. FERC has certified the North American Electric Reliability Corporation ("NERC") as the electric reliability organization. NERC has promulgated mandatory reliability standards, and, in conjunction with the regional reliability organizations that operate under FERC's and NERC's authority and oversight, enforces those mandatory reliability standards.

#### *Massachusetts (NE-ISO)*

Mass Solar's facilities in Massachusetts are connected to the distribution grid so their generated electricity flows directly to the utility and is not offered into the integrated market. All revenues associated with this project flow from the state's net metering and RPS programs. Under the terms of the long-term contract, all power is delivered to the off-taker, thereby minimizing the impact of any market changes on revenues.

#### *Minnesota (MISO)*

Lakeswind in Minnesota is connected to the Midcontinent Independent System Operator ("MISO") and falls under FERC jurisdiction. FERC-approved MISO tariffs dictate market and operational requirement for facilities. MISO has both an energy market and a voluntary capacity market. Under the long-term contract, all power is delivered to the off-taker at the plant gate, thereby minimizing the impact of any market changes on revenues.

#### *New Hampshire (NE-ISO)*

Antrim in New Hampshire is connected to the New England Independent System Operator ISO ("NE-ISO") and falls under FERC jurisdiction. FERC-approved NE-ISO tariffs dictate market and operational requirement for facilities. The NE-ISO has both an energy and a mandatory participation capacity markets. Antrim's electricity is offered into the market and transferred to our customers. Antrim has a long-term Capacity Supply Obligation so is not impacted by near term changes to the capacity market auction process. As Antrim and most other intermittent wind projects must take part in the the NE-ISO's Do Not Exceed Dispatch, any market changes should have an immaterial impact on revenues.

#### *Pennsylvania (PJM)*

Big Level in Pennsylvania is connected to the PJM ISO and falls under FERC jurisdiction. FERC-approved PJM tariffs dictate market and operational requirement for facilities. PJM has both an energy and a mandatory participation capacity market. All attributes, energy and capacity have been transferred to the buyer. As a result, any market changes should have an immaterial impact on revenues.

#### *Wyoming*

The Wyoming Public Service Commission (the "WPSC") has the power to regulate and supervise every "public utility," which includes four investor-owned electric utilities in Wyoming, as well as certain natural gas, electric, telecommunications, water, and pipeline services. For regulated electric utilities, the WPSC approves regulated rates, reviews integrated resource plans, approves mergers and acquisitions and grants certificates of public convenience and necessity for large facilities (e.g. power plants and transmission lines). The Commission does not have regulatory authority over the Wyoming Wind Farm or the power generated therefrom because such generation is sold at wholesale.

## Australia

Australia has two separate major electricity markets, the NEM encompassing all the major population centres on the Eastern seaboard and the WEM covering the southwest region of Western Australia including its capital city of Perth. A number of smaller, standalone electricity grids serve regional population centres including the North West Interconnected System ("NWIS") in the Pilbara region of Western Australia and the Darwin-Katherine System ("DKS") in the Northern Territory.

The Australian Energy Market Operator ("AEMO") is the market operator for both the WEM and the NEM; however, the two markets are completely independent of each other having different market rules and no physical interconnection between them. The WEM includes both a market for generation capacity and a gross pool to trade energy with a single reference node for wholesale prices. The NEM is a pure energy-only market with five regional reference nodes for wholesale prices corresponding to each of the participating states of Queensland, New South Wales, Victoria, Tasmania and South Australia.

The Public Utilities Office of Western Australia ("PUO") in its capacity as advisor to the Minister for Energy is currently working with AEMO and the wider electricity industry to implement further reforms to the WEM including introducing constrained network access and required consequential amendments to the wholesale market rules to allow for security constrained dispatch. A comprehensive program of works is currently underway with a goal of implementing reforms on October 1, 2022.

The PUO is also working with participants in the NWIS to introduce some elements of a more formal electricity market, including providing third-party access to the Horizon Power-owned part of the NWIS and providing centralized coordination of dispatch and ancillary services.

## RISK FACTORS

Readers should consider carefully the risk factors set forth below as well as the other information contained and incorporated by reference in this AIF. For a further discussion of risk factors affecting TransAlta Renewables, please refer to "Risk Factors" in the Annual MD&A, which is incorporated by reference herein.

A reference herein to a material adverse effect on the Company means such an effect on the Company or its operations, business, financial condition, results of operations, and/or cash flows, as the context requires.

### *Risks Relating to our Operations and Commercial Operations*

#### **The operation and maintenance of our facilities involve risks that may materially and adversely affect our business.**

The revenue generated by our power generation facilities is dependent on the amount of electricity and availability of electricity generated by them. The ability of our power generation facilities to generate the amount of power expected is a primary determinant in the amount of revenues that will be received. A number of different factors, including: equipment failure due to wear and tear, latent defect, design error, operator error, slow response to outages due to underperforming monitoring systems, changes in wind, solar or water flows, and vandalism or theft could adversely affect the amount of power produced, and thus the revenues and cash available for dividends and distributions. Unplanned outages or prolonged downtime for maintenance and repair typically increase operation and maintenance expenses and reduce revenues as a result of selling less electricity. Although our generation facilities have generally operated in accordance with expectations, there can be no assurance that they will continue to do so. To the extent that a facility's equipment requires longer than forecasted down times for maintenance and repair, or suffers disruptions of power generation for other reasons, our business, operating results, financial condition or prospects could be adversely affected.

There can be no assurance that our maintenance program will be able to detect potential failures in its facilities prior to occurrence or eliminate all adverse consequences in the event of failure. In addition, weather-related interference, work stoppages and other unforeseen problems may disrupt the operation and maintenance of the facilities and may materially and adversely affect the Company.

While we may maintain an inventory of, or otherwise make arrangements to obtain, spare parts to replace critical equipment and maintain insurance for property damage to protect against certain operating risks, these protections may not be adequate to cover lost revenues or increased expenses and penalties that could result if our generation facilities are not operated at a level necessary to comply with sales contracts.

#### **We may fail to meet financial expectations.**

Our quarterly revenue and results of operations are difficult to predict and fluctuate from quarter to quarter. Our quarterly results of operations are influenced by a number of factors, including weather, unplanned maintenance and

other risks described in this AIF, many of which are beyond our control, which may cause such results to fall below market expectations.

Although we base our planned operating expenses in part on the expectations of future revenue, a significant portion of our expenses are relatively fixed in the short term. If revenue for a particular quarter is lower than expected, we will likely be unable to proportionately reduce operating expenses for that quarter, which will adversely affect our operational results for that quarter.

**We are party to significant third-party contracts and the failure of such third parties to fulfill or renew their contractual obligations could have a material adverse effect on us.**

We sell the majority of our power and, in some cases, environmental attributes such as renewable energy credits, to third parties under long-term PPAs. If, for any reason, any of the purchasers of power under such PPAs are unable or unwilling to fulfill their contractual obligations under the relevant PPA, refuse to accept delivery of power pursuant to the relevant PPA, or do not renew their contractual arrangements with us, our assets, liabilities, business, financial condition, results of operations and cash flow could be materially and adversely affected as we may not be able to replace the agreement with another agreement on equivalent terms and conditions. See "*General Development of the Business - 2017 - Status of Commercial Operations at South Hedland Facility*" in this AIF.

External events, such as a severe economic downturn or changes in governmental policies, could impair the ability of some counterparties to the PPAs or some end-use customers to pay for electricity received. In addition, we have and will continue to enter into contracts with third parties for materials and equipment, which often require deposits to be made prior to equipment or other goods and services being delivered. Should one or more of these third parties be unable to meet their obligations under the contracts, such an occurrence could result in possible loss of revenue, delay in service and increase in operating costs.

**We could suffer lost revenues or increased expenses and penalties if we are unable to operate our generation facilities at a level necessary to comply with our PPAs.**

The ability of our facilities to generate the maximum amount of power that can be sold under our PPAs is an important determinant of our revenues. Under certain PPAs, if the facility delivers less than the required quantity of electricity in a given contract year, we may be subject to penalty payments to the relevant purchaser. The payment of any such penalties could adversely affect our revenues, profitability, dividends and cash available for distributions.

**We are subject to extensive government regulation, incentive mechanisms and supervision in a number of jurisdictions, which may impact our financial performance, limit our flexibility and, in the event of non-compliance, could result in adverse actions by regulatory authorities against us.**

The market for our electricity generation is heavily influenced by Canadian, Australian and US government regulations and policies. These regulations and policies often relate to the encouragement of renewable energy development, electricity pricing and interconnection. See "*Business of TransAlta Renewables - Ongoing and Recently Passed Environmental Legislation*" and "*Business of TransAlta Renewables - Regulatory Framework*".

Our inability to predict, influence or respond appropriately to changes in law or regulatory frameworks, including any inability to obtain expected or contracted increases in electricity tariff rates or tariff adjustments for increased expenses, could adversely impact our operational results. Furthermore, changes in laws, regulations or changes in the application or interpretation of regulatory provisions in jurisdictions where we operate (particularly where long-term tariffs or PPAs are subject to regulatory review or approval) could adversely affect our business. These include, but are not limited to: (a) changes in applicable PPA rates, including changes in the timing of PPA rate increases or decreases; (b) adverse changes in laws, regulations or policies or their interpretation; and (c) other changes related to licensing or permitting which affect our ability to conduct our business in an orderly fashion. Any of the foregoing events may result in lower revenues, higher costs and/or lower margins for the affected projects, which would adversely affect our operational results.

We hold permits and licenses from various regulatory authorities for the construction and operation of our facilities. These licenses and permits are critical to the operation of our business. The majority of these permits and licenses are long term in nature, reflecting the anticipated useful life of the facilities. In some cases these permits may need to be renewed prior to the end of the anticipated useful life of such facilities and there is no guarantee that such renewals will be granted. These permits and licenses require compliance with the terms thereof. In addition, delays may occur in obtaining the necessary government approvals required for future power projects.

**Our business is subject to stringent environmental laws and regulations.**

Our business activities are subject to stringent environmental laws and regulations promulgated and administered by federal, provincial, state and municipal governments where we operate. These laws and regulations generally concern air quality, use of water, wildlife, wetlands preservation, remediation of contamination, waste disposal requirements,



preservation of archaeological artifacts, endangered species preservation and noise limitations, among others. Failure to comply with applicable environmental laws and regulations or to obtain or comply with any necessary environmental permits pursuant to such laws and regulations could result in fines or other sanctions being levied against us. Environmental laws and regulations affecting power generation and distribution are complex and have tended to become more stringent over time as regulators work to minimize the impacts of climate change. These laws and regulations have imposed, and proposed laws and regulations could impose in the future, additional costs on the operation of our facilities.

**Negative public or community response to wind, gas and hydroelectric facilities and energy infrastructure assets could adversely affect our projects.**

Negative public or community response to wind, solar, gas and hydroelectric power facilities and/or energy infrastructure assets could adversely affect our ability to operate our facilities. This type of negative response could lead to legal, public relations and other challenges that impede our ability to meet our development and construction targets, achieve commercial operations for a facility on schedule or generate revenues. While public opposition is usually of greatest concern during the development stage of renewable assets, which is when the public has the ability to provide comments and appeal regulatory permits, continued opposition could have an impact on operations. An increase in opposition to our requests for permits or successful challenges or appeals to permits issued to us could materially adversely affect our plans. Legal requirements, changes in scientific knowledge and public complaints regarding issues such as noise generated by wind turbines could impact the operation of certain of our renewable assets in the future. In addition, there may be negative opinions on gas generation as climate change becomes a bigger concern for our stakeholders.

**Changes in general economic conditions may have a material adverse effect on us.**

Adverse changes in general economic and market conditions could negatively impact demand for electricity, revenue, operating costs, timing and extent of capital expenditures, the net recoverable value of plant, property and equipment, results of financing efforts, credit risk and counterparty risk, which could cause us to suffer a material adverse effect.

**We depend on certain partners that may have interests or objectives which conflict with our own objectives and such differences could have a negative impact on our business.**

We have entered into various types of arrangements with parties, or joint venture parties and community stakeholders for the operation of our facilities. Certain of these stakeholders may have or develop interests or objectives which are different from or even in conflict with our own objectives. Any such differences could have a negative impact on the success of our facilities. We are sometimes required, through the permitting and approval process, to notify and consult with various stakeholder groups, including landowners, First Nations and municipalities. Any claim that such notification and consultation processes were not properly adhered to could result in a negative impact to our facilities or business.

**We may be unsuccessful in the advancement or defence of legal actions.**

In the normal course of business, we may become party to legal actions. There can be no assurance that we will be successful in the advancement or defence of these claims and legal actions or that any claim or legal action that is decided adverse to us will not materially and adversely affect us.

**We may be exposed to regulatory risks associated with the price and assessment of environmental attributes.**

Current market conditions may limit our ability to hedge sufficient volumes of our anticipated environmental attributes, leaving us exposed to the risk of falling prices for environmental attributes. Future prices for these attributes are also subject to the risk that regulatory changes will adversely affect prices.

**The reduction, elimination or expiration of government subsidies and economic incentives could adversely affect our prospects for growth.**

We seek to take full advantage of government policies that promote renewable power generation and enhance the economic feasibility of renewable power projects. Renewable power generation sources currently benefit from various incentives in the form of feed-in tariffs ("FITs"), rebates, tax credits, renewable portfolio standards (a US government policy mechanism used to support the adoption of renewable power by setting a targeted percentage of a jurisdiction's total electricity procurement from renewable power) and other incentives throughout the markets in which we participate or intend to participate. The removal or phasing out of any such incentives could adversely affect our revenues as well as our prospects for growth as these incentives enhance the economic feasibility of developing and building renewable power projects.

**Disruption of fuel supply to certain of our gas plants could have an adverse impact on our financial condition.**

Many of our natural gas facilities depend on third parties to supply fuel. As a result, we face the risks of supply interruptions and fuel price volatility, as fuel deliveries may not exactly match those required for energy sales, due in part to our need to prepurchase fuel inventories for reliability and dispatch requirements. Disruption of transportation services of fuel, whether because of weather-related problems, strikes, lock-outs, break-downs of locks and dams or other events, could impair our ability to generate electricity and could adversely affect our results of operations.

**Unexpected changes in the cost of maintenance or in the cost and durability of components for our facilities may adversely affect our results of operations.**

Unexpected increases in our cost structure that are beyond our control could materially and adversely impact our financial performance. Examples of such costs include, but are not limited to: unexpected increases in the cost of procuring materials and services required for maintenance activities, and unexpected replacement or repair costs associated with equipment underperformance or lower-than-anticipated durability.

**The power generation industry has certain inherent risks related to worker health and safety and the environment that could cause us to suffer unanticipated expenditures or to incur fines, penalties or other consequences material to our business and operations.**

The ownership and operation of our power generation assets carry an inherent risk of liability related to worker health and safety and the environment, including the risk of government-imposed orders to remedy unsafe conditions and/or to remediate or otherwise address environmental contamination, potential penalties for contravention of health, safety and environmental laws, licenses, permits and other approvals, and potential civil liability. Compliance with health, safety and environmental laws (and any future changes) and the requirements of licenses, permits and other approvals are expected to remain material to our business. The occurrence of any of these events or any changes, additions to or more rigorous enforcement of, health, safety and environmental laws, licenses, permits or other approvals could have a significant impact on operations and/or result in additional material expenditures. As a consequence, no assurances can be given that additional environmental and workers' health and safety issues relating to presently known or unknown matters will not require unanticipated expenditures, or result in fines, penalties or other consequences (including changes to operations) material to our business and operations.

**Our facilities, construction projects and operations are exposed to the effects of natural disasters, public health crises and other catastrophic events beyond our control and such events could result in a material adverse effect.**

Our facilities, construction projects and operations are exposed to potential interruption and damage, partial or full loss, resulting from environmental disasters (e.g. floods, high winds, fires, ice storms, earthquakes and public health crises, such as pandemics and epidemics), other seismic activity, equipment failures and the like. Climate change can increase the frequency and severity of these extreme weather events. There can be no assurance that in the event of an earthquake, hurricane, tornado, tsunami, typhoon, terrorist attack, act of war or other natural, man-made or technical catastrophe, all or some parts of our generation facilities and infrastructure systems will not be disrupted. The occurrence of a significant event which disrupts the ability of our power generation assets to produce or sell power for an extended period, including events which preclude existing customers under PPAs from purchasing electricity, could have a material negative impact on our business. Our generation assets could be exposed to effects of severe weather conditions, natural and man-made disasters and other potential catastrophic events. The occurrence of such an event may not release us from performing our obligations pursuant to PPAs or other agreements with third parties. In addition, many of our generation facilities are located in remote areas which make access for repair of damage difficult.

**Changes in statutory or contractual restrictions may have an adverse effect on our ability to service debt obligations.**

We conduct a significant amount of business through subsidiaries and partnerships. Our ability to meet and service debt obligations is dependent upon the results of operations of our subsidiaries and the payment of funds by our subsidiaries in the form of distributions, loans, dividends or otherwise. In addition, our subsidiaries may be subject to statutory or contractual restrictions that limit their ability to distribute cash to us.

**Our revenues may be reduced upon expiration or termination of PPAs.**

We sell power under PPAs which expire at various times. Currently, our PPAs have a weighted average remaining term by capacity of approximately 11 years and the earliest scheduled termination is a contract that expires in 2022. In addition, these PPAs may be subject to termination in certain circumstances, including default by the facility or plant owner or operator. When a PPA expires or is terminated, it is possible that the price received by the relevant facility or plant for power under subsequent selling arrangements may be reduced significantly. It is also possible that PPAs negotiated after the initial PPAs have run their course may not be available at prices that permit the continued operation of the affected facility or plant on a profitable basis. If this occurs, the affected facility or plant may be forced to permanently cease operations. Closure of one or more facilities or plants in which the Company has an interest could have a material adverse effect on our business.

**Our communications and monitoring technology and operating systems may experience interruptions or breaches in security which could subject us to increased operating costs and other liabilities.**

We rely on technology, mainly on computer, telephone, satellite, cellular and related networks and infrastructure, to conduct business and monitor the production of our generation facilities. These systems and infrastructure could be vulnerable to unforeseen problems including, but not limited to, vandalism and theft. Our operations are dependent upon our ability to protect our information and operating technology against damage from fire, power loss, telecommunications failure or a similar catastrophic event. While we have dedicated resources for maintaining appropriate levels of cybersecurity and we utilize third-party technology to help protect us against security breaches and cyber incidents, our measures may not be effective and our information technology and infrastructure may be vulnerable to attacks by hackers or breached due to employee error, malfeasance or other disruptions. Any such security breaches and cyber incidents or other disruptions could jeopardize the security of information stored in and transmitted through our systems and network infrastructure, and could result in significant setbacks, potential liabilities, and deter future customers. Additionally, we must be able to protect our generation facility infrastructure against physical damage and service disruption from any of a variety of causes. While we have systems, policies, hardware, practices and procedures designed to prevent or limit the effect of failure or interruptions of our generation facilities and infrastructure, there can be no assurance that these measures will be sufficient and that any such failures or interruptions will not occur or, if they do occur, that they will be adequately addressed in a timely manner.

**Cyberattacks may cause disruptions to our operations and could have a material adverse effect on our business.**

We rely on our information technology systems to process, transmit, and store electronic information and data used for the safe operation of our assets. In today's ever-evolving cybersecurity threat landscape, any attacks or breaches of our network or information systems may cause disruptions to our business operations. Cyberattackers may use a range of techniques, from exploiting vulnerabilities within our user base to using sophisticated malicious code on a single or distributed basis to try to breach our network security controls. Attackers may also use a combination of techniques in their attempt to evade safeguards such as firewalls, intrusion prevention systems, and antivirus software that exist on our network infrastructure systems. A successful cyberattack may allow for the unauthorized interception, destruction, use or dissemination of our information and may cause disruptions to our business operations.

We continuously take measures to secure our infrastructure against potential cyberattacks that may damage our infrastructure, systems and data. Our cybersecurity program aligns with industry best practices to ensure that a holistic approach to security is maintained. We have implemented security controls to help secure our data and business operations, including access-control measures, intrusion detection and prevention systems, logging and monitoring of network activities, and implementing policies and procedures to ensure the secure operations of the business. We have also established security awareness programs to help educate our users on cybersecurity risks and their responsibilities in helping protect the business.

While we have systems, policies, hardware, practices, data backups and procedures designed to prevent or limit the effect of security breaches of our generation facilities and infrastructure, there can be no assurance that these measures will be sufficient and that such security breaches will not occur or, if they do occur, that they will be adequately addressed in a timely manner. We closely monitor both preventive and detective measures to manage these risks.

**We are not able to insure against all potential risks and may become subject to higher insurance premiums.**

Our business is exposed to the risks inherent in the construction and operation of electricity generation facilities, such as breakdowns, manufacturing defects, natural disasters, theft, terrorist and cyberattacks and sabotage. We are also exposed to environmental risks. We maintain insurance policies, covering usual and customary risks associated with our business, with creditworthy insurance carriers. Our insurance policies, however, do not cover losses as a result of force majeure, natural disasters, terrorist attacks, cyberattacks or sabotage, among other things. In addition, we generally do not maintain insurance for certain environmental risks, such as environmental contamination. Our insurance policies are subject to annual review by the respective insurers and may not be renewed at all or on similar or favourable terms. A significant uninsured loss or a loss significantly exceeding the limits of our insurance policies or the failure to renew such insurance policies on similar or favourable terms could have a material adverse effect on our business, financial condition and results of operations.

**Our facilities rely on national and regional transmission systems and related facilities that are owned and operated by third parties and have both regulatory and physical constraints that could impede access to electricity markets.**

Our power generation facilities depend on electric transmission systems and related facilities owned and operated primarily by third parties to deliver the electricity we generate to delivery points where ownership changes and we are paid. These grids operate with both regulatory and physical constraints which in certain circumstances may impede access to electricity markets. There may be instances in system emergencies in which our power generation facilities are physically disconnected from the power grid, or their production curtailed, for short periods of time. Most of our electricity sales contracts do not provide for payments to be made if electricity is not delivered.

Our power generation facilities may also be subject to changes in regulations governing the cost and characteristics of use of the transmission and distribution systems to which our power generation facilities are connected. Our power generation facilities in the future may not be able to secure access to interconnection or transmission capacity at reasonable prices, in a timely fashion or at all, which could then cause delays and additional costs in attempting to negotiate or renegotiate PPAs or to construct new projects. In addition, we may not benefit from preferential arrangements in the future. Any such increased costs and delays could delay the commercial operation dates of our new projects and negatively impact our revenues and financial condition.

**Dam and dyke failures may result in lost generating capacity, increased maintenance and repair costs and other liabilities.**

A natural or man-made disaster, and certain other events, could potentially cause dam failures that could impact our hydroelectric facilities, and result in a loss of generating capacity, damage to the environment or damage and harm to third parties or the public. Such failures could require us to incur significant expenditures of capital and other resources, or expose us to significant liabilities for damages. There can be no assurance that our dam safety program will be able to detect potential dam failures prior to occurrence or eliminate all adverse consequences in the event of failure. Other safety regulations could change from time to time, potentially impacting our costs and operations. The consequences of dam failures could have a material adverse effect on us. We attempt to manage this risk by following preventative maintenance procedures and obtaining insurance coverage; however, in the event of a sufficiently large dam failure, insurance coverage, if available, may not be adequate and we may suffer a material adverse effect.

**A significant increase in water rental costs could result in a material adverse effect.**

We are required to make rental payments for water rights. Significant increases in water rental costs in the future or changes in the way that governmental authorities in the jurisdictions in which our hydroelectric assets are located regulate water supply could have a material adverse effect on our business, operating results, financial condition or prospects.

**We may be adversely affected if our supply of water is materially reduced.**

Hydroelectric power generation facilities require continuous water flow for their operation. Shifts in weather or climate patterns, seasonal precipitation, the timing and rate of melting, run-off, and other factors beyond our control, may reduce the water flow to our facilities. Any material reduction in the water flow to our facilities would limit our ability to produce and market electricity from these facilities and could have a material adverse effect on us. There is an increasing level of regulation respecting the use, treatment and discharge of water, and respecting the licensing of water rights in jurisdictions where we operate. Any such change in regulations could have a material adverse effect on us.

**Variations in weather can affect demand for electricity and our ability to generate electricity.**

Wind is naturally variable; therefore, the level of electricity production from our wind facilities will also be variable. In addition, the strength and consistency of the wind resource at our wind facilities may vary from what we anticipate due to a number of factors including: the extent to which site-specific historic wind data and wind forecasts accurately reflect actual long-term wind speeds, strength and consistency; the potential impact of climatic factors; the accuracy of assumptions relating to, among other things, weather, icing and soiling of wind turbines, site access, wake and line losses and wind shear; the potential impact of topographical variations; and the potential for electricity losses to occur before delivery. A reduced amount of wind at the location of one or more of our wind facilities over an extended period may reduce the production from such facilities, as well as any environmental attributes that accrue and reduce our revenues and profitability.

Due to the nature of our business, our earnings are sensitive to weather variations from period to period. Variations in winter weather affect the demand for electrical heating requirements. Variations in summer weather affect the demand for electrical cooling requirements. These variations in demand translate into spot market price volatility. Variations in precipitation also affect water supplies, which in turn affect our hydroelectric assets. Also, variations in sunlight conditions can have an effect on energy production levels from our solar farm. Variations in weather may be impacted by climate change resulting in sustained higher temperatures and rising sea levels, which could have an impact on our generating assets.

Ice can accumulate on wind turbine blades in the winter months. The accumulation of ice on wind turbine blades depends on a number of factors, including temperature, ambient humidity and wind. The accumulation of ice on wind turbine blades can have a significant impact on energy yields, could result in the wind turbine experiencing more downtime potentially reducing the life expectancy of the wind turbine and revenue. Extreme cold temperatures can also impact the ability for wind turbines to operate effectively and this could result in wind turbines experiencing more downtime and reduced production. We employ mitigation strategies to reduce the impact of icing events that include proactively shutting down turbines when an icing event is detected.

## *Risks Related to the Growth of our Business*

**Our growth strategy is focused on acquiring and developing highly contracted, high-quality renewable and natural gas power generation facilities and other infrastructure assets. We may face significant competition for the acquisition or development of high-quality renewable and natural gas power projects and may not successfully complete and integrate our growth initiatives.**

Our growth strategy is to acquire or develop highly contracted, high-quality renewable and natural gas power generation facilities and other infrastructure assets that generate stable cash flows, with the objective of achieving returns on invested capital. However, there is no certainty that we will be successful in pursuing this strategy. There can be no assurance that we will be able to identify attractive acquisition or development candidates in the future (whether through our relationship with TransAlta or otherwise), that we will be able to realize growth opportunities that increase the amount of cash available for distribution or that will be successfully integrated into our existing operations. We believe we will face significant competition for growth opportunities and, to the extent that any opportunities are identified, and we may be unable to effect such growth opportunities due to a lack of necessary capital resources.

We compete with other renewable power companies as well as traditional energy companies, which may have greater financial and other resources for new business. We compete with other renewable power companies primarily for growth opportunities for access to transmission or distribution networks. We also compete with other power companies for the limited pool of personnel with requisite industry knowledge and experience. Any failures to successfully prevail in such competition will negatively affect our long-term growth prospects.

Any growth opportunity could involve potential risks, including an increase in indebtedness, the inability to successfully integrate operations, the inability to retain or secure PPAs and FIT rates, the potential disruption of our ongoing business, the diversion of management's attention from other business concerns and the possibility that we will incur more costs than originally anticipated or, in the case of acquisitions, more than the acquired company or interest is worth. There may also be liabilities that we failed to discover, or are unable to discover, in our due diligence prior to the consummation of the growth opportunity, and we may not be indemnified for some or all of these liabilities. In addition, our funding requirements associated with the growth opportunity, including any acquisition, development or integration costs, may reduce the funds available to pay dividends.

**We are dependent on access to parts and equipment from certain key suppliers and we may be adversely affected if these relationships are not maintained.**

Our ability to compete and expand will be dependent on having access, at a reasonable cost, to equipment, parts and components that are technologically and economically competitive with those utilized by our competitors. Although we have individual framework agreements with various suppliers, there can be no assurance that these relationships with suppliers will be maintained. If they are not maintained, our ability to compete may be impaired due to lack of access to these sources of equipment, parts or components.

**Risks relating to growth projects and acquisitions may materially adversely affect us.**

Growth projects and acquisitions that we undertake may be subject to execution and capital cost risks, including, but not limited to, cost escalations, construction delays, shortages of raw materials or skilled labor and capital constraints. The occurrences of these risks could have a material and adverse impact on our financial condition, results of operations and cash flows.

Expansion of our business through growth projects and acquisitions may place increased demands on management, operating systems, internal controls and financial and physical resources. In addition, the process of integrating acquired businesses or growth projects may involve unforeseen difficulties. Failure to successfully manage or integrate any acquired businesses or growth projects could have a material adverse impact on our financial condition, results of operations and cash flows. Further, we cannot make assurances that we will be successful in integrating any acquisition or that the commercial opportunities or operational synergies of any acquisition will be realized as expected.

With respect to acquisitions, we cannot make assurances that we will identify suitable transactions or that we will have access to sufficient resources, through the capital markets or otherwise, to pursue and complete any identified acquisition opportunities on a timely basis and at a reasonable cost. Any acquisition that we propose or complete would be subject to normal commercial risks that the transaction may not be completed on the terms negotiated, on time, or at all. An unavoidable level of risk remains regarding potential undisclosed or unknown liabilities relating to any acquisition. The existence of such undisclosed liabilities may have a material adverse impact on our business, financial condition, results of operations and cash flows.

**We may pursue growth opportunities in new markets that are subject to foreign laws or regulation that are more onerous than the laws and regulations to which we are currently subject.**

We may pursue growth opportunities in new markets that are subject to regulation by various foreign governments and regulatory authorities and to the application of foreign laws. Such foreign laws or regulations may not provide for the same type of legal certainty and rights, in connection with our contractual relationships in such countries, as are afforded to us currently, which may adversely affect our ability to receive revenues or enforce our rights in connection with our foreign operations. In addition, the laws and regulations of some countries may limit our ability to hold a majority interest in certain growth projects, thus limiting our ability to control the operation of such projects. Any existing or new operations may also be subject to significant political, economic and financial risks, which vary by country, and may include: (a) changes in government policies or personnel; (b) changes in general economic conditions; (c) restrictions on currency transfer or convertibility; (d) changes in labour relations; (e) political instability and civil unrest; (f) regulatory or other changes in the local electricity market; and (g) breach or repudiation of important contractual undertakings by governmental entities and expropriation and confiscation of assets and facilities for less than fair market value.

### *Risks Relating to our Relationship with TransAlta*

**TransAlta exercises substantial influence over us and we are highly dependent on TransAlta as our manager. TransAlta is not necessarily required to act in our best interest or the best interest of our shareholders, and the liability of TransAlta is limited in certain respects.**

TransAlta is our majority shareholder and is also responsible for the management and operation of our business. In addition, TransAlta is able to nominate directors to the Board and we rely on TransAlta to identify acquisition and growth opportunities. As a result, TransAlta is able to exercise substantial influence over our operations, administration and growth strategy. We depend on the management, operations and administration services provided by or under the direction of TransAlta under the Management and Operational Services Agreement. TransAlta personnel and support staff that provide services to us are not required to have as their primary responsibility our management and administration or to act exclusively for us. Even if we are not satisfied with the manner in which TransAlta performs its services under the Management and Operational Services Agreement, we are not entitled to replace TransAlta as manager prior to the expiry of the initial 20-year term, unless: (i) the agreement is terminated by the written agreement of TransAlta and us or (ii) TransAlta beneficially owns directly or indirectly less than 10 per cent of the issued and outstanding Common Shares and the Management and Operational Services Agreement has been terminated. Under the terms of the Governance and Cooperation Agreement, TransAlta is not required to allocate any minimum level of dedicated resources for the pursuit of renewable power generation opportunities for us, nor is TransAlta required to offer any specific opportunities to us. Any failure to effectively manage our operations or to implement our growth strategy could have a material adverse effect on our business, financial condition and results of operations.

The Management and Operational Services Agreement and the Governance and Cooperation Agreement with TransAlta do not impose any duty on TransAlta to act in our best interest, and TransAlta is not prohibited from engaging in other business activities that may compete with our business. Additionally, although TransAlta and its affiliates will have access to material confidential information relating to the Company and will be subject to confidentiality obligations in respect thereof, the Management and Operational Services Agreement does not contain general confidentiality provisions. See "Employee and Governance Matters" below.

**We may not recognize anticipated benefits from our relationship with TransAlta.**

Our relationship with TransAlta is expected to be a critical factor in the growth and success of our business. There are no assurances that we will be able to maintain our relationship with TransAlta or realize the benefits it anticipates from our relationship with TransAlta. If we are unable to successfully execute on this strategic relationship, our overall growth could be impaired and our operational and financial performance could be lower than expected.

**The departure of some or all of TransAlta's key employees could prevent us from achieving our objectives.**

We depend on the diligence, skill and business contacts of TransAlta's employees and the information and opportunities they generate during the normal course of their activities. TransAlta has experienced departures of key employees in the past and this could also occur in the future and we cannot predict the impact that any such departures will have on our ability to achieve our objectives. The departure of a significant number of TransAlta's key employees for any reason, or the failure to appoint qualified or effective successors in the event of such departures, could have a material adverse effect on our ability to achieve our objectives. The Governance and Cooperation Agreement and Management and Operational Services Agreement do not require TransAlta to maintain the employment of any of its employees or to cause any particular employees to provide services to us.

**The role and ownership of TransAlta may change, which could create uncertainty for us.**

The arrangement between TransAlta and us does not require TransAlta to maintain any ownership level in the Company. Accordingly, TransAlta may transfer its interest in the Company to a third party, including in a merger or consolidation or in a transfer of all or substantially all of its assets, without the consent of our shareholders. We cannot predict with any certainty the effect that any such transfer would have on the trading price of the Common Shares or our ability to raise capital or make investments in the future. As a result, the future of the Company would be uncertain and our business, financial condition and results of operations may suffer.

**The interests of TransAlta and our management structure may create significant conflicts of interest that may not be resolved in a manner that is in our best interests or the best interests of our public shareholders.**

Our ownership and management structure involves a number of relationships that may give rise to conflicts of interest between us and our public shareholders, on the one hand, and TransAlta, on the other hand. In certain instances, the interests of TransAlta may differ from the interests of the Company and our public shareholders, including with respect to the types of acquisitions made, the timing and amount of distributions by the Company, the reinvestment of returns generated by operations, the use of leverage when making acquisitions and the appointment of outside advisors and service providers. See "*Material Contracts*".

**The liability of TransAlta is limited under the Management and Operational Services Agreement and we have agreed to indemnify TransAlta against claims that they may face in connection with providing services to us, which may lead them to assume greater risks when making decisions relating to the Company than it otherwise would if acting solely for its own account.**

Under the Management and Operational Services Agreement, TransAlta has not assumed any responsibility other than to provide or arrange for the provision of the services described in the Management and Operational Services Agreement in good faith and will not be responsible for any action that we take in following or declining to follow its advice or recommendations. In addition, under the Management and Operational Services Agreement, the liability of TransAlta is limited to the fullest extent permitted by law to conduct involving bad faith, fraud or willful misconduct or, in the case of a criminal matter, actions that were known to have been unlawful, except that TransAlta is liable for liabilities arising from gross negligence. In addition, we have agreed to indemnify TransAlta to the fullest extent permitted by law from and against any claims, liabilities, losses, damages, costs or expenses incurred by an indemnified person or threatened in connection with our operations, investments and activities or in respect of or arising from the Management and Operational Services Agreement or the services provided by TransAlta, except to the extent that the claims, liabilities, losses, damages, costs or expenses are determined to have resulted from the conduct in respect of which such persons have liability as described above. These protections may result in TransAlta tolerating greater risks when making decisions than otherwise would be the case, including determining when to use leverage in connection with acquisitions. The indemnification arrangements to which TransAlta will be a party may also give rise to legal claims for indemnification that would be adverse to us and our shareholders.

*Risks Relating to Accounting and Finance Activities*

**We may be unable to finance our business or the growth of our business.**

Recovery of the capital investment in renewable power projects generally occurs over a long period of time. As a result, we must obtain funds from equity or debt financings, including tax equity transactions, or from government grants, to help finance the acquisition of projects and to help pay the general and administrative costs of operating our business. Our ability to arrange financing, either at the corporate level or at the subsidiary level (including non-recourse project debt), and the costs of such capital are dependent on numerous factors, including: (a) general economic and capital market conditions; (b) credit availability from banks and other financial institutions; (c) investor confidence in the Company and the markets in which we conduct operations; (d) our financial performance and the financial performance of our subsidiaries; (e) our level of indebtedness and compliance with covenants in our debt agreements; and (f) our cash flow.

An increase in interest rates or a reduction in the availability of project debt financing could reduce the number of renewable and natural gas power projects that we are able to finance. Although most of our borrowings have fixed-rate interest payments, an increase in interest rates could lower our return on investment. We may not be able to obtain needed funds on terms acceptable to us, or at all for these or other reasons. If we are unable to raise additional funds when needed, we could be required to delay acquisition and construction of projects, reduce the scope of projects, abandon or sell some or all of our projects or generation facilities, or default on our contractual commitments in the future, any of which could adversely affect our business, financial condition and results of operations.

**We may be unable to refinance existing indebtedness on terms comparable to existing terms, if at all.**

We will be required to refinance certain indebtedness as it becomes due from time to time. There are no guarantees that we will be able to obtain financing to repay the principal amount of such indebtedness and, if it does, that such financing will be available on terms comparable to existing terms or that are acceptable to us. If we do obtain new indebtedness at materially higher interest rates or on more punitive principal repayment terms than the terms of our existing debt, it is likely to have a negative effect on our financial results and cash available for distribution.

**We may be subject to foreign exchange risk.**

We may be exposed to changes in the Canadian dollar in relation to foreign currency denominated equipment purchases or in relation to investments in foreign assets. As an example, we have exposure to U.S. currency as a result of our economic interests in the Wyoming, Lakeswind, Mass Solar, Big Level and Antrim assets and exposure to Australian currency as a result of our economic interest in the Australian Assets. Changes in the values of these currencies relative to the Canadian dollar could negatively impact our cash flows or the value of our foreign investments. While we attempt to manage this risk through the use of hedging instruments, and by matching revenues and expenses by currency at the corporate level, there can be no assurance that these risk management efforts can be done on a cost effective basis or will be effective, and fluctuations in these exchange rates may have an effect on our business.

**If our project assets become impaired, significant charges to earnings may be required.**

We may be required to record charges to earnings if project assets become impaired. Such a charge might have a significant impact on our financial position and results of operations. We will review project assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

**Provisions for income taxes may not be sufficient.**

Our operations are complex, and the computation of the provision for income taxes involves tax interpretations, regulations, and legislation that are continually changing. In addition, our tax filings are subject to audit by taxation authorities. While we believe that our tax filings have been made in material compliance with all applicable tax interpretations, regulations, and legislation, we cannot guarantee that we will not have disagreements with taxation authorities with respect to our tax filings that could have a material adverse effect on our business.

The Company and its subsidiaries are subject to changing laws, treaties and regulations in and between countries. Various tax proposals in the countries we operate in could result in changes to the basis on which deferred taxes are calculated or could result in changes to income or non-income tax expense. There has recently been an increased focus on issues related to the taxation of multinational corporations. A change in tax laws, treaties or regulations, or in the interpretation thereof, could result in a materially higher income or non-income tax expense which could have a material adverse impact on the Company.

**We are subject to uncertainties regarding when the Company will become cash taxable.**

The anticipated cash tax horizon of the Company is subject to risks, uncertainties and other factors that could cause the Company's cash tax horizon to occur sooner than our current projection of approximately two years on owned assets. In particular, our anticipated cash tax horizon is subject to risks pertaining to changes in our operations, asset base, corporate structure or changes to tax legislation, regulations or interpretations. In the event we become cash taxable sooner than projected, our cash available for distribution and our dividend could decrease, which could in turn have a material adverse impact on the value of our Common Shares.

*Risks Related to the Common Shares and Tracking Preferred Shares*

**The market price for the Common Shares may be volatile.**

The market price for Common Shares may be volatile and subject to wide fluctuations in response to numerous factors, many of which are beyond our control, including the following: (a) actual or anticipated fluctuations in our and/or TransAlta's results of operations; (b) recommendations by securities research analysts; (c) changes in the economic performance or market valuations of other companies that investors deem comparable to us (including TransAlta); (d) the loss or resignation of executive officers and other key personnel of TransAlta and/or the Company; (e) sales or perceived sales of additional Common Shares; (f) significant acquisitions or business combinations, strategic partnerships, joint ventures or capital commitments by or involving us or our competitors which prove to be ill considered; and (g) trends, concerns, technological or competitive developments, regulatory changes and other related issues in the renewable power generation industry or our target markets.

Financial markets have experienced significant price and volume fluctuations in recent years that have particularly affected the market prices of equity securities of companies and such fluctuations have, in many cases, been unrelated to the operating performance, underlying asset values or prospects of such companies. Accordingly, the market price of



the Common Shares may decline even if our operating results, underlying asset values or prospects have not changed. Additionally, these factors, as well as other related factors, may cause decreases in asset values which may result in impairment losses. Certain institutional investors may base their investment decisions on consideration of our environmental, governance and social practices and performance against such institutions' respective investment guidelines and criteria, and failure to meet such criteria may result in a limited or no investment in the Common Shares by those institutions, which could adversely affect the trading price of the Common Shares.

**Our cash dividend payments are not guaranteed.**

The payment of dividends under our dividend policy is not guaranteed and could fluctuate with our performance. The Board has the discretion to determine the amount of dividends to be declared and paid to shareholders. We may alter the dividend policy at any time and the payment of dividends will depend on, among other things, results of operations; financial condition; current and expected future levels of earnings; operating cash flow; liquidity requirements; market opportunities; income taxes; maintenance and growth capital expenditures; debt repayments; legal, regulatory and contractual constraints; working capital requirements; tax laws and other relevant factors. Our short and long-term borrowings may prohibit us from paying dividends at any time at which a default or event of default would exist under such debt, or if a default or event of default would exist as a result of paying the dividend.

Over time, our capital and other cash needs may change significantly from its current needs, which could affect whether we pay dividends and the amount of any dividends we may pay in the future. If we continue to pay dividends at the current level, we may not retain a sufficient amount of cash to finance growth opportunities, meet any large unanticipated liquidity requirements or fund our operations in the event of a significant business downturn. The Board, subject to the requirements of our bylaws and other governance documents, may amend, revoke or suspend our dividend policy at any time. A decline in the market price or liquidity, or both, of the Common Shares could result if the Board establishes large reserves that reduce the amount of monthly dividends paid or if we reduce or eliminate the payment of dividends, which could result in losses to shareholders.

We will be dependent on the operations of our facilities for our cash availability. The actual amount of cash available for dividends to holders of Common Shares will depend upon numerous factors relating to each of our generation facilities including: the strength and consistency of the wind resources at the wind power facilities of the Company, the availability of water flows in respect of the hydroelectric facilities, the amount of sunlight at our solar farm, operating performance of our generation facilities, profitability, changes in revenues, fluctuations in working capital, capital expenditure levels, applicable laws, compliance with contracts and contractual restrictions contained in the instruments governing any indebtedness. Any reduction in the amount of cash available for distribution from our generation facilities will reduce the amount of cash available for us to pay dividends to holders of Common Shares.

**The Common Share price could decline due to the potential for share issuances for other purposes.**

The Board may issue an unlimited number of Common Shares without any vote or action by our shareholders, subject to the rules of the TSX or any other stock exchange on which our securities may be listed from time to time. We may make future acquisitions or enter into financings or other transactions involving the issuance of securities. If we issue any additional equity, the percentage ownership of existing shareholders will be reduced and diluted and the price of the Common Shares could decline.

**TransAlta's rights under the Investor Liquidity Agreement could negatively impact our share price if exercised.**

TransAlta holds, directly and indirectly, approximately 60 per cent of our issued and outstanding Common Shares. The Investor Liquidity Agreement provides for Demand Registration rights in favour of TransAlta that enables TransAlta to require us to qualify by prospectus or register, as applicable, all or a portion of the Common Shares held, directly and indirectly, by TransAlta for a distribution to the public in Canada. The Investor Liquidity Agreement also provides TransAlta with incidental, or piggy-back, qualification rights. Where we propose to make a distribution, for our own account or for the account of any other holder of our securities, TransAlta will have the right to include a specified number of its Common Shares in the distribution, subject to certain limitations. Sales of Common Shares owned, directly and indirectly, by TransAlta through the Investor Liquidity Agreement or otherwise could exert downwards pressure on the trading price of the Common Shares and could impair the future ability of the Company to raise capital through the sale of our equity securities. See "*Employee and Governance Matters - Investor Liquidity Agreement*".

**Dependence on financial performance of the Wyoming wind farm, Lakeswind wind farm, Mass Solar facility, Big Level wind farm, Antrim wind farm and the Australian Assets.**

The value of the Common Shares depends, in large part, on the financial performance and profitability of the Wyoming wind farm, Lakeswind wind farm, Mass Solar facility, Big Level wind farm, Antrim wind farm and the Australian Assets. Any decline in the financial performance of the assets in which we own an economic interest or adverse change in such other factors could have an adverse effect on us and the value and market price of the Common Shares. In addition, the Wyoming wind farm, Lakeswind wind farm, Mass Solar facility, Big Level wind farm, Antrim wind farm and the Australian

Assets are potentially subject to the liabilities attributed to TransAlta, even if those liabilities arise from lawsuits, contracts or indebtedness that do not relate or are otherwise attributed to us. As a result, the price of the Common Shares may not reflect our performance alone and may reflect the performance or financial condition of TransAlta as a whole.

**Nature of economic interests in our assets may adversely impact our business performance and/or results.**

TransAlta, directly and indirectly through TA Power, TA Energy and TEC L.P., retains legal title to the Wyoming wind farm, Lakeswind wind farm, Mass Solar facility, Big Level wind farm, Antrim wind farm and the Australian Assets. Except as specifically provided for in the Australia Investment Agreements and the terms of the Wyoming Wind Tracking Preferred Shares, the Lakeswind Tracking Preferred Shares, the Mass Solar Tracking Preferred Shares, the Big Level and Antrim Tracking Preferred Shares and the Australian Tracking Preferred Shares, we have no legal rights in respect of the assets. Rather, we own Wyoming Wind Tracking Preferred Shares, Lakeswind Tracking Preferred Shares, Mass Solar Tracking Preferred Shares, Big Level and Antrim Tracking Preferred Shares and Australian Tracking Preferred Shares that provide an economic interest in and based on the cash flows from the assets broadly equal to the underlying net distributable profits of TEA, the Wyoming wind farm, the Lakeswind wind farm, the Mass Solar facility, the Big Level wind farm, the Antrim wind farm and the Australian Assets. This means that we are not able to dispose of the Wyoming wind farm, Lakeswind wind farm, Mass Solar facility, Big Level wind farm, Antrim wind farm or the Australian Assets or exercise other rights of ownership in respect of the assets, nor do we have any ability to directly oversee or manage the ownership and operation of the assets. Consequently, our rights in relation to the assets in which we hold an economic interest may be of less value to us compared to the value of direct ownership of the assets.

In the event of a liquidation of TA Power or TA Energy, the Wyoming Wind Tracking Preferred Shares, the Lakeswind Tracking Preferred Shares, the Mass Solar Tracking Preferred Shares, the Big Level and Antrim Tracking Preferred Shares and the Australian Tracking Preferred Shares will entitle us, as the sole holder, to an amount equal to the fair market value of the respective assets in accordance with the terms of the Wyoming Wind Tracking Preferred Shares, the Lakeswind Tracking Preferred Shares, the Mass Solar Tracking Preferred Shares, the Big Level and Antrim Tracking Preferred Shares and the Australian Tracking Preferred Shares.

**Insufficient funds to satisfy distributions.**

Holders of Wyoming Wind Tracking Preferred Shares, the Lakeswind Tracking Preferred Shares, the Mass Solar Tracking Preferred Shares, the Big Level and Antrim Tracking Preferred Shares and Australian Tracking Preferred Shares are entitled to receive regular cash dividend payments in priority to the holders of the common shares. There can be no certainty that the Wyoming wind farm, the Lakeswind wind farm, the Mass Solar facility, the Big Level wind farm, the Antrim wind farm and the Australian Assets will generate sufficient funds to satisfy the dividend payments payable by TA Energy and TA Power in respect of the Wyoming Wind Tracking Preferred Shares, the Lakeswind Tracking Preferred Shares, the Mass Solar Tracking Preferred Shares, the Big Level and Antrim Tracking Preferred Shares and the Australian Tracking Preferred Shares.

## EMPLOYEE AND GOVERNANCE MATTERS

The officers of TransAlta Renewables are: John Kousinioris, President; Brent Ward, Chief Financial Officer; Aron Willis, Senior Vice-President, Growth; Scott Jeffers, Corporate Secretary; and Kathryn Higgins, Managing Director and Corporate Controller. Management and administrative services are provided by TransAlta through the Management and Operational Services Agreement. See "Employee and Governance Matters – Management and Operational Services Agreement" and "General Development of the Business – Three-Year History - 2019 – Management and Board of Directors Changes" in this AIF. We do not have any direct employees.

The employees of TransAlta who provide general and administrative services to us pursuant to the Management and Operational Services Agreement are the same individuals who previously performed similar services for TransAlta when TransAlta owned the Initial Assets. Accordingly, we expect that we and TransAlta will achieve certain managerial, administrative and operational efficiencies, thereby reducing the overall costs associated with managing and operating the business of TransAlta Renewables. It is anticipated that TransAlta's knowledge and expertise in relation to our asset base will contribute to their effective operation and utilization. For over 100 years, TransAlta has been a responsible operator and a proud member of the communities in which its employees work and live. TransAlta aligns its corporate goals with the UN Sustainable Development Goals and has been recognized by CDP (formerly Carbon Disclosure Project) as an industry leader on Climate Change Management. TransAlta has also achieved the Silver level Progressive Aboriginal Relations (PAR) designation by the Canadian Council for Aboriginal Business.

## *Management and Operational Services Agreement*

On August 9, 2013, we entered into the Management and Operational Services Agreement with TransAlta pursuant to which TransAlta, on a sole and exclusive basis, provides us with all the general administrative services as may be required or advisable for the management of the affairs of the Company.

The management services provided by TransAlta under the Management and Operational Services Agreement include, but are not limited to: (i) ensuring that we comply with our continuous disclosure and other obligations under Canadian securities laws; (ii) managing our financing, borrowing and investing activities; (iii) developing, implementing and monitoring our strategic plan; (iv) providing us with investor relations services including the calling and holding of all meetings of our shareholders; (v) computing any dividends to our shareholders and overseeing the payment thereof; (vi) undertaking all required acts and responsibilities in connection with the acquisition and disposition of our assets and property; (vii) providing accounting and bookkeeping services, including for the preparation of our annual and interim financial statements and the preparation and filing of all tax returns; (viii) providing information technology services and making available all information technology equipment as may be reasonably necessary; (ix) managing any litigation and other legal services; (x) providing risk management services; (xi) providing office space, equipment and personnel as may be reasonably necessary; (xii) arranging for audit, legal and other third-party professional and non-professional services; and (xiii) generally providing all other services as may be necessary, or requested by us, for the management and administration of TransAlta Renewables.

The operational and maintenance services provided by TransAlta under the Management and Operational Services Agreement include, but are not limited to: (i) administering and causing us and each of our operating subsidiaries (the "Operating Entities") to perform and satisfy our and their obligations under all material contracts; (ii) providing or securing operational, management and maintenance services; (iii) providing procurement and logistical services; (iv) providing engineering, technical and evaluation services; (v) providing environment, health and safety services; (vi) ensuring proper training of personnel and the provision of necessary equipment and services; (vii) obtaining and maintaining all permits, authorities and consents required for the conduct of business by the Operating Entities; and (viii) generally providing all other services as may be necessary or requested for the operation and maintenance of the assets held by the Operating Entities.

Pursuant to the Management and Operational Services Agreement, TransAlta has agreed to: (i) perform all services under the Management and Operational Services Agreement in compliance with applicable laws; (ii) observe or cause to be observed and performed on our behalf, in all material respects, all agreements from time to time entered into for and on our behalf; and (iii) not commingle the funds of TransAlta Renewables with any party. In the exercise of its powers and authority under the Management and Operational Services Agreement, TransAlta is required to exercise the powers and discharge its duties thereunder honestly, in good faith and in the best interests of the Company and in connection therewith shall exercise that degree of care, diligence and skill that a reasonably prudent manager of a corporation in Canada, having responsibilities of a similar nature to those under the agreement, would exercise in comparable circumstances. TransAlta is prohibited from entering into or committing to any transaction which, in accordance with applicable laws, or pursuant to the requirements of any other written agreement between the Company and TransAlta or any of their respective subsidiaries or affiliates, requires the approval of our independent directors or the approval of our shareholders, unless such approval is first obtained.

TransAlta and its personnel are obligated to devote as much time as is reasonably necessary for the proper discharge of its services under the Management and Operational Services Agreement. We expressly consent in the Management and Operational Services Agreement to TransAlta and its affiliates (other than us) and their respective officers, directors and employees engaging in any business or activities whatsoever, including those that may be in competition or conflict with our business and/or our interests; provided that in the event of a material conflict between our interests and the interests of TransAlta, TransAlta is required to provide written notice to us setting forth particulars of such conflict and, thereafter, our independent directors shall be responsible to take all such actions and make all such decisions relating to such matter.

In connection with the services provided under the Management and Operational Services Agreement, we pay TransAlta the G&A Reimbursement Fee, which fee is meant to cover TransAlta's management, administrative, accounting, planning and other head office costs associated with providing services to us under the Management and Operational Services Agreement. The G&A Reimbursement Fee was initially set at \$10 million per annum and is adjusted annually for changes in the CPI and increases or decreases of five per cent of the earnings before interest, tax and depreciation associated with additions or divestitures of assets. The G&A Reimbursement Fee is payable in equal quarterly installments. On January 6, 2016, the G&A Reimbursement Fee was increased by approximately \$5 million for 2016, which reflects the impact of the acquisition of the economic interest in the Canadian Assets and CPI adjustments. During 2017, we paid TransAlta a development fee of \$1 million upon signing the power purchase agreement with New Brunswick Power for the Kent Hills 3 project. We paid a further fee of \$2 million to TransAlta in 2018 upon achieving the commercial operation date of Kent Hills 3 in lieu of the annual five per cent of incremental EBITDA that would otherwise be paid pursuant to the Management and Operational Services Agreement.

The G&A Reimbursement Fee is reviewed periodically, and in any event no less than once every five years, to consider, in good faith, whether any adjustments to the G&A Reimbursement Fee are required to reflect changing economic circumstances, regulatory requirements and/or the additional or reduced, as the case may be, time, effort and expense in administering our asset base. On February 28, 2020, the Management Agreement was amended so that the G&A Reimbursement Fee will be calculated quarterly in an amount equal to 5 per cent of Comparable EBITDA of the immediately prior fiscal quarter, without duplication for any indirect costs associated with the management, administrative, accounting, planning and other head office costs of TransAlta that reduce the dividends or distributions that would otherwise be payable to the Corporation on any of the tracking preferred shares. This amendment is not expected to result in any material change to the amount of the G&A Reimbursement Fee.

In addition to the G&A Reimbursement Fee, we also reimburse TransAlta for all out-of-pocket and third-party fees and costs, including salaries, wages and benefits associated with managing and operating the assets held by our Operating Entities not captured by the G&A Reimbursement Fee. We directly incur and are responsible for any costs associated with (i) insurance, (ii) compensation for our independent directors, (iii) direct engagement of third-party experts for assessing or valuing a growth opportunity, (iv) third-party audit and legal fees, and (v) all other costs associated with being a publicly traded reporting issuer.

The reimbursement of expenses to TransAlta or its affiliates, including through the G&A Reimbursement Fee, is not intended to provide TransAlta or its affiliates with any financial gain or loss.

TransAlta, its affiliates and associates and each of their respective directors, officers and employees are not, either directly or indirectly, liable, answerable or accountable to TransAlta Renewables or any of our shareholders, for any loss or damage resulting from the performance or non-performance of management services (including any mistake or error of judgment), unless such loss or damage resulted from the fraud, wilful default or gross negligence of such party.

Each of TransAlta Renewables and TransAlta, and their respective directors, officers and employees, are indemnified by the other party in certain circumstances arising under the Management and Operational Services Agreement.

The Management and Operational Services Agreement has an initial 20-year term, that shall be automatically renewed for further successive terms of five years after the expiry of the initial term or any renewal term, unless terminated by either party not less than 180 days prior to the expiration of the initial term or any renewal term, as the case may be. The Management and Operational Services Agreement may be terminated by: (a) mutual agreement; (b) TransAlta Renewables upon the occurrence of a material default by TransAlta; and (c) TransAlta (i) upon the occurrence of a material default by TransAlta Renewables or (ii) upon a "Change of Control" of TransAlta Renewables, being the acquisition by any person or group of persons acting jointly and in concert (other than TransAlta and its affiliates) of more than 50 per cent of the issued and outstanding Common Shares. In addition, the Management and Operational Services Agreement may be terminated by TransAlta Renewables by a majority vote of our independent directors at any time if TransAlta's direct and indirect ownership in the Company falls below 20 per cent.

### *Governance and Cooperation Agreement*

On August 9, 2013, we entered into the Governance and Cooperation Agreement with TransAlta. Pursuant to the Governance and Cooperation Agreement, we and TransAlta have agreed, among other things, that TransAlta will serve as the primary vehicle through which TransAlta Renewables and our affiliates acquire and/or develop renewable and natural gas power projects.

The Governance and Cooperation Agreement provides, among other things, that we will rely on TransAlta to: (i) identify acquisition and/or development opportunities for us (the "Opportunities"), (ii) evaluate the Opportunities for their suitability, (iii) present Opportunities suitable for, and meeting, our strategic goals and objectives to the Board for assessment and approval and (iv) execute and complete any Opportunities approved by the Board. TransAlta and its affiliates are not required to allocate any minimum level of dedicated resources for the pursuit of renewable power generation opportunities nor is TransAlta or its affiliates required to offer any specific opportunities to us. Approval of any Opportunities involving a transfer of interests from TransAlta or its affiliates to us must be supported and approved by a majority of the independent directors of the Board.

The Board is currently comprised of six individuals, three of whom are appointed by TransAlta, three of whom are independent (pursuant to NI 52-110) and all of whom are "financially literate" as defined in NI 52-110 (subject to available exemptions in NI 52-110). See "Directors and Officers - Directors". TransAlta is entitled to nominate a majority of the directors of TransAlta Renewables for so long as the percentage of outstanding Common Shares beneficially owned directly or indirectly by TransAlta is not less than 35 per cent of the issued and outstanding Common Shares. If the percentage of outstanding Common Shares beneficially owned directly or indirectly by TransAlta is less than 35 per cent but greater than or equal to 10 per cent, TransAlta is entitled to nominate its proportionate share of the directors of TransAlta Renewables (rounded up to the next whole number) based on the percentage of outstanding Common Shares beneficially owned directly or indirectly by TransAlta. Finally, irrespective of the percentage of outstanding Common Shares beneficially owned directly or indirectly by TransAlta, TransAlta will be entitled to nominate one

director of TransAlta Renewables for so long as the Management and Operational Services Agreement is in effect. The nominees of TransAlta to the Board may be directors, officers or employees of TransAlta or its affiliates, or other persons, at TransAlta's discretion. Board nominees of TransAlta who are directors, officers or employees of TransAlta or its affiliates are not entitled to any compensation from TransAlta Renewables, except as described herein. Subject to any requirements of the CBCA, TransAlta is entitled to nominate for appointment or election to the Board a replacement director for any nominee director of TransAlta who ceases for any reason to be a director of the Board, provided TransAlta remains, at that time, entitled to appoint such director.

To the fullest extent permitted by law, we will indemnify all directors, officers, former directors and former officers of TransAlta Renewables, as applicable, and all persons who act or acted at our request as a director or officer, or an individual acting in a similar capacity, of another person, and his or her heirs and legal personal representatives, against all costs, charges and expenses, including any amount paid to settle any action or satisfy a judgment, reasonably incurred by him or her in respect of any civil, criminal, administrative, investigative or other proceeding in which the individual is involved because of that association with TransAlta Renewables or such other person if, (i) he or she acted honestly and in good faith with a view to the best interests of TransAlta Renewables or such other person, as the case may be; and (ii) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, he or she had reasonable grounds for believing that his or her conduct was lawful.

Under the Governance and Cooperation Agreement, the Company has also provided TransAlta with certain pre-emptive rights to participate in future offerings of securities in the Company. Provided TransAlta beneficially owns directly or indirectly not less than 10 per cent of the issued and outstanding Common Shares and subject to limited exceptions, if TransAlta Renewables proposes to issue any Common Shares or other equity securities (the "Offered Securities"), or any option or other right to acquire Offered Securities or other securities convertible into or exercisable or exchangeable for Offered Securities (the "Convertible Securities"), we will first offer TransAlta the opportunity to subscribe for and acquire that number of Offered Securities or Convertible Securities equal in amount to TransAlta's then outstanding proportionate interest in the Common Shares or any such lesser amount as TransAlta may elect to subscribe for at the subscription price as determined by the Board. If any of the Offered Securities or Convertible Securities are not subscribed for by TransAlta within the applicable periods provided for in the Governance and Cooperation Agreement, we may proceed to offer such unsubscribed Offered Securities or Convertible Securities within the period of 90 days after the expiration of such applicable period to any person, provided the price at which such Offered Securities or Convertible Securities are issued is not less than the subscription price offered to TransAlta and the terms of payment for such Offered Securities or Convertible Securities are not more favourable to such person than the terms of payment offered to TransAlta. The foregoing pre-emptive right will also apply to any debt securities or securities convertible into debt securities issued by us on the basis that TransAlta will be offered the right to subscribe for up to that percentage of the total aggregate principal amount of debt securities or number of securities convertible into debt securities to be issued equal to the percentage of outstanding Common Shares beneficially owned directly or indirectly by TransAlta.

The Governance and Cooperation Agreement also provides that, under the circumstances set forth in the Governance and Cooperation Agreement, we will provide TransAlta and TransAlta's board of directors with certain financial and other information and data with respect to TransAlta Renewables and its business, properties, financial positions, results of operations and prospects, as may reasonably be required by TransAlta to meet its reporting obligations. In addition, we are obligated to: (a) maintain effective disclosure controls and procedures and to comply with applicable securities laws in a manner substantially similar to TransAlta's internal practices; (b) provide financial reports to TransAlta in connection with each meeting of the board of directors of TransAlta and meeting of the audit committee of TransAlta; (c) prepare all financial information to be provided by us to TransAlta or filed with any securities regulatory authority, in accordance with the same accounting principles as applied by TransAlta; (d) consult with TransAlta as to the timing of any financial guidance in respect of TransAlta Renewables for a current or future period that we intend to publish or otherwise make public, and give TransAlta the opportunity to review that information relating to TransAlta Renewables and to comment thereon; and (e) cooperate fully, and use commercially reasonable efforts to cause the auditors of TransAlta Renewables to cooperate fully, with TransAlta to the extent reasonably requested by TransAlta in the preparation of any filings made by TransAlta with any securities regulator pursuant to applicable securities laws.

The Governance and Cooperation Agreement will continue in force until the earlier of (a) the date on which the Governance and Cooperation Agreement is terminated by the written agreement of TransAlta and TransAlta Renewables, or (b) the date on which (i) TransAlta beneficially owns directly or indirectly less than 10 per cent of the issued and outstanding Common Shares, and (ii) the Management and Operational Services Agreement has been terminated in accordance with its terms.

### *Investor Liquidity Agreement*

On August 9, 2013, we entered into the Investor Liquidity Agreement with TransAlta, which provides that TransAlta and any direct or indirect transferee of TransAlta who shall become party to the Investor Liquidity Agreement (each a "Holder") may, at any time and from time to time, make a written request to the Company to file a prospectus in any

jurisdiction or jurisdictions of Canada in which we are at the relevant time a reporting issuer in respect of the distribution of all or part of the Common Shares then held by the Holder ("Registrable Securities"), subject to certain restrictions as discussed below (a "Demand Registration"). Upon receipt of a Demand Registration, we will be required to use our reasonable commercial efforts to file a prospectus in order to permit the offer and sale or other disposition or distribution in Canada of all or any portion of the Common Shares held, directly or indirectly, by the Holder. We may satisfy this obligation through the use of a shelf prospectus and applicable shelf prospectus supplement(s) and, in connection therewith, each Holder agrees to reasonably cooperate with us in connection with the filing of such shelf prospectus.

The Demand Registration rights are subject to certain limitations, including that: (a) other than in respect of a prospectus supplement, we will not be obligated to file a prospectus in respect of a Demand Registration within 75 days after the effective date of a previous Demand Registration; and (b) we will not be obligated to file a prospectus in respect of a Demand Registration unless the request is for a number of Registrable Securities with a market value that is equal to at least \$50 million as of the date of the request for Demand Registration. In the event that a majority of the independent members of the Board determine in good faith and acting reasonably that any Demand Registration should not be made or continued because it would materially adversely affect a pending or proposed material acquisition, merger, recapitalization, consolidation, reorganization or similar transaction, or negotiations, discussions or pending proposals with respect thereto, or would require the disclosure of material non-public information that, in the good faith judgement of a majority of the independent members of the Board would have a material adverse effect on the Company and our subsidiaries taken as a whole, or a material adverse effect on the Company or any of our significant subsidiaries (a "Valid Business Reason") then, (i) we will have the right to postpone the filing of a prospectus (or prospectus supplement, as applicable) until such Valid Business Reason no longer exists, provided that such postponement may not extend for a period of more than 90 days after receipt of the request for such Demand Registration and provided further that such right may not be exercised by us more than once in any 12-month period; (ii) we may cause a prospectus (or prospectus supplement, as applicable) that has been filed pursuant to a Demand Registration request to be withdrawn, or a majority of the independent members of the Board, as applicable, may postpone amending or supplementing any previously filed prospectus pursuant to a Demand Registration request until such Valid Business Reason no longer exists, provided that such withdrawal or postponement may not extend for a period of more than 90 days, and provided further that such right may not be exercised by us more than once in any 12-month period; and (iii) we will give written notice of our determination to defer filing, postpone the amendment of or withdraw a prospectus (or prospectus supplement, as applicable) and of the fact that the Valid Business Reason for such deferral, postponement or withdrawal no longer exists, in each case, promptly after the occurrence thereof. If we defer the filing of a prospectus, or withdraw a filed prospectus, and if the Holder within 30 days after receipt of a notice of deferral or withdrawal from the Company advises us in writing that it has determined to withdraw such request for a Demand Registration, then such Demand Registration and the request therefor will be deemed to be withdrawn and such request will be deemed not to have been given for purposes of determining whether such Holder has exercised its right to a Demand Registration permitted to such Holder.

If at any time we propose to file a preliminary prospectus with respect to the distribution of any Common Shares to the public, then we will, at that time, give prompt notice of the proposed distribution to each Holder, which notice will offer each Holder the opportunity to qualify for distribution such number of Registrable Securities as such Holder may request. We will use commercially reasonable efforts to include in such prospectus such Registrable Securities as the Holders may request (a "Piggy-Back Registration"), unless our underwriter or agent determines, acting reasonably, that including such Registrable Securities in the distribution would adversely affect the distribution by the Company.

In the case of a prospectus filed in connection with a Demand Registration, the Holder will pay all applicable fees and expenses incident to our performance of, or compliance with, the terms of the Demand Registration customarily paid by issuers or sellers of securities, excluding listing expenses of stock exchanges and the fees and disbursements of legal counsel for the Company, which will be paid by us. In the case of a Piggy-Back Registration or our participation in a Demand Registration, such fees and expenses will be allocated between the Holder(s), as applicable, and us in an equitable manner having regard to the proportion of the number of Common Shares sold by each relative to the total number of Common Shares sold pursuant to the prospectus.

All underwriting discounts and commissions, transfer taxes attributable to a sale of Registrable Securities, and any out-of-pocket expenses of the underwriters in connection with each prospectus filed in connection with a Demand Registration or Piggy-Back Registration, other than the fees and expenses described in the preceding paragraph, will be borne by the Holder(s), as applicable, and any other participating sellers (including the Company, if applicable) in proportion to the number of Common Shares sold by each relative to the total number of Common Shares sold pursuant to the prospectus.

The Investor Liquidity Agreement will continue in force until the earlier of the date on which: (a) there are no longer any outstanding Registrable Securities; (b) the Holders, collectively, beneficially own, directly or indirectly, 10 per cent or less of the issued and outstanding Common Shares; or (c) the Investor Liquidity Agreement is terminated by written agreement of all the persons who, at the time such agreement is terminated, are the holders of all Registrable Securities.

## CAPITAL AND LOAN STRUCTURE

### *General*

Our authorized share capital consists of an unlimited number of Common Shares, an unlimited number of Class B Shares and an unlimited number of preferred shares, issuable in series ("Preferred Shares"). As at February 28, 2020, there were 265,851,078 Common Shares and no Class B Shares or Preferred Shares issued and outstanding.

### *Common Shares*

Holders of Common Shares are entitled to one vote per Common Share at meetings of shareholders of the Company, except meetings at which only holders of another particular class or series shall have the right to vote. Holders of Common Shares are not entitled to vote separately as a class upon any proposal to amend the articles of the Company in the manner referred to in paragraphs (a), (b) or (e) of subsection 176(1) of the CBCA.

Subject to the rights of the Preferred Shares and any other shares of the Company ranking senior to the Common Shares with respect to the payment of dividends, holders of the Common Shares are entitled to receive dividends, exclusive of any other shares of the Company, if, as and when declared by the Board. Holders of the Common Shares are also entitled to share equally in any distribution of the assets of the Company upon liquidation, dissolution, bankruptcy or winding up of the Company or any other distribution of its assets among the shareholders of the Company for the purpose of winding up its affairs (such event referred to as a "Distribution"). Such participation is subject to the rights accorded to holders of the Preferred Shares and other shares of the Company ranking senior to the Common Shares with respect to payment on a Distribution. The Common Shares are not convertible into any other class of shares.

On May 31, 2018, the Board of Directors approved the implementation of a Dividend Reinvestment Plan ("DRIP") for Canadian holders of Common Shares. The price for Common Shares purchased under the DRIP will be 98 per cent of the average market price of the Common Shares for the five trading days on which not less than 500 Common Shares are traded on the TSX immediately prior to the dividend payment date. Common Shares acquired under the DRIP will be issued from the treasury of the Company. TransAlta does not intend to participate in the DRIP.

### *Class B Shares*

On August 1, 2017, the previously issued Class B Shares were converted into Common Shares on the commercial operation date of the South Hedland project and, as such, currently there are no Class B Shares outstanding. See "General Development of the Business - Three-Year History - 2017 - Class B Share Conversion and Dividend Increase" in this AIF.

Holders of Class B Shares are entitled to receive notice of and to attend and vote at all meetings of shareholders of the Company (including meetings of holders of Common Shares), except meetings of holders of Preferred Shares. Each Class B Share is entitled to one vote. The Class B Shares are not entitled to dividends.

In the event of the voluntary or involuntary liquidation, dissolution or winding up of the Company, or any other distribution of its assets among its Shareholders for the purpose of winding up its affairs, holders of Class B Shares, subject to the preferences accorded to holders of Preferred Shares and any other shares of the Company ranking senior to the Class B Shares from time to time with respect to payment on a Distribution, will be entitled to share equally among holders of Class B Shares and Common Shares, share for share, in the remaining property of the Company.

### *Preferred Shares*

The Preferred Shares are issuable in series and have such rights, restrictions, conditions and limitations as the Board may from time to time determine. Holders of Preferred Shares are not entitled to vote separately as a series upon any proposal to amend the articles of the Company in the manner referred to in paragraphs (a), (b) or (e) of subsection 176(1) of the CBCA.

Subject to the rights of holders of any other shares of the Company ranking senior to the Preferred Shares with respect to the payment of dividends, holders of the Preferred Shares are entitled to receive payment of dividends, in priority to holders of the Common Shares and any other shares ranking junior to the Preferred Shares with respect to the payment of dividends. Holders of the Preferred Shares are entitled to be paid rateably with holders of each other series of Preferred Shares the amount of accumulated dividends, if any, specified as being payable preferentially to holders of such series. In the event of a Distribution, holders of each series of Preferred Shares are entitled, in priority to holders of Common Shares or any other shares of the Company ranking junior to the Preferred Shares with respect to payment on a Distribution, to be paid rateably with holders of each other series of Preferred Shares the amount, if any, specified as being payable preferentially to holders of such series on a Distribution. Currently, there are no Preferred Shares issued and outstanding.

### *Non-Recourse Debt*

In February 2015, Pingston Power Inc., a jointly owned subsidiary of Canadian Hydro Developers Inc. ("CHD"), issued bonds secured by their jointly owned Pingston facility. Pingston Power Inc.'s share of gross proceeds was \$45 million. This debenture bears interest at 2.95 per cent per annum, with interest payable semi-annually and no principal repayments until maturity in May 2023.

In October 2015, we issued senior amortizing bonds secured by our Melancthon 1 & 2 and Wolfe Island wind facilities for gross proceeds of \$442 million. The debentures bear interest at 3.834 per cent per annum, with interest and principal payable semi-annually, maturing in December 2028.

In June 2016, New Richmond Wind L.P., a wholly owned subsidiary of CHD, issued a \$159 million bond that bears interest at 3.963 per cent, with principal and interest payable semi-annually in blended payments until maturity on June 30, 2032. The bond is secured by a first-ranking charge over all the assets of New Richmond Wind L.P.

In October 2017, Kent Hills Wind L.P, a jointly owned subsidiary of CHD and Natural Forces Technologies Inc., issued a \$260 million bond that bears interest at 4.454 per cent, with principal and interest payable quarterly in blended payments until maturity on November 30, 2033. The bond is secured by a first-ranking charge over all the assets of Kent Hills Wind LP. CHD maintains 83 per cent ownership of Kent Hills Wind L.P. while Natural Forces Technologies Inc. maintains a 17 per cent interest in the assets. Proceeds from the financing were, in part, used for the early redemption of all of the unsecured debentures issued by CHD that were scheduled to mature in June 2018.

### *Syndicated Credit Facility*

On July 24, 2017, we entered into a syndicated credit agreement giving us access to a \$500 million committed credit facility. The facility is fully committed for four years, and in the second quarter of 2019 was amended from \$500 million to \$700 million and extended to 2023. The facility is subject to a number of customary covenants and restrictions in order to maintain access to the funding commitments. This facility has been made available for general corporate purposes, including financing ongoing working-capital requirements and providing financing for construction capital, growth opportunities and the repayment of outstanding borrowings. Approximately \$381 million was available at December 31, 2019. In conjunction with entering into the new syndicated credit agreement in 2017, the \$350 million working capital credit facility provided by TransAlta was terminated.

### *Restrictions on Debt*

The syndicated credit facility includes restrictive covenants requiring the cash proceeds received from the sale of certain assets to be reinvested into similar assets or in the repayment of outstanding borrowings on the facility and a reduction in availability equal to such amount. The Melancthon Wolfe Wind L.P, Pingston Inc., New Richmond Wind L.P, and Kent Hills Wind L.P. bonds are subject to customary financing conditions and covenants that restrict the Company's ability to access funds generated by the facilities' operations. Upon meeting certain distribution tests, typically performed once per quarter, the funds are able to be distributed by the subsidiary entities to their respective parent entity. These restrictions include the ability to meet a debt service coverage ratio prior to distribution.

### *Tracking Shares*

The Company has invested in preferred shares of subsidiaries of TransAlta that pay dividends based on tracking certain financial results of other subsidiaries of TransAlta. The income received by the Company in aggregate and over time indirectly provides the Company with cash flows based on those of the subsidiaries.

<b>Tracking Share</b>	<b>Issuer</b>	<b>Description</b>
Australian Tracking Preferred Shares	TA Energy	Together with the preferred shares in the capital of TEA held by the Company, the Australian Tracking Preferred Shares effectively entitle the holders of such preferred shares to an economic interest based on the cash flows broadly equal to the underlying net distributable profits of TEA.
Australian Loan Tracking Shares	TA Power	The terms of the Australian Loan Tracking Shares effectively entitle the holders of such preferred shares to dividends equal to the interest payments on the amortizing term loan payable by TEA to another subsidiary of TransAlta, and such Australian Loan Tracking Shares are redeemed when scheduled or other principal repayments occur on this underlying loan with such redemption amounts being equal to the amount of the applicable principal repayment.
Big Level and Antrim Tracking Preferred Shares	TA Power	The terms of the Big Level and Antrim Tracking Preferred Shares effectively entitle the holders of such preferred shares to the free cash flow from the Big Level and Antrim wind farms through dividends, based on the pre-tax net earnings generated by the Big Level and Antrim wind farms.



Tracking Share	Issuer	Description
Lakeswind Tracking Preferred Shares	TA Power	The terms of the Lakeswind Tracking Preferred Shares effectively entitle the holders of such preferred shares to the free cash flow from the Lakeswind wind farm through dividends, based on the pre-tax net earnings generated by the Lakeswind wind farm.
Mass Solar Tracking Preferred Shares	TA Power	The terms of the Mass Solar Tracking Preferred Shares effectively entitle the holders of such preferred shares to the free cash flow from the Mass Solar facility through dividends, based on the pre-tax net earnings generated by the Mass Solar facility.
Wyoming Wind Tracking Preferred Shares	TA Power	The terms of the Wyoming Wind Tracking Preferred Shares effectively entitle the holders of such preferred shares to the free cash flow from the Wyoming wind farm through dividends, based on the pre-tax net earnings generated by the Wyoming wind farm.

## CREDIT RATINGS

TransAlta Renewables is not rated. However, Melancthon Wolfe Wind LP has a debt rating from Dominion Bond Rating Service Limited ("DBRS"). The rating pertains to the series 1 senior amortizing bonds issued by Melancthon Wolfe Wind L.P. Melancthon Wolfe Wind LP's outstanding senior secured debt is supported only by the assets by which it is secured, and not by any other assets owned by the Company.

### *Melancthon Wolfe Wind LP Series 1 Senior Amortizing Bonds*

As of December 31, 2019, Melancthon Wolfe Wind LP had a series 1 senior amortizing bond rating of BBB (stable) by DBRS. The BBB rating continues to be underpinned by the strength of the fixed-price PPAs, the solid and consistent operating track record as well as the strength of the owner-operator.

According to the DBRS rating system, debt instruments have ratings that range from a high of AAA to a low of D. Debt securities rated BBB are of adequate credit quality. The capacity for the payment of financial obligations is considered acceptable, but the entity may be vulnerable to future events. "High" or "Low" subcategories indicate the relative standing within a rating category for all rating categories other than AAA and D. DBRS also assigns rating trends of "positive," "stable" or "negative" to each of its ratings. The rating trend indicates the direction in which DBRS considers the rating is headed should present tendencies continue, or in some cases, unless challenges are addressed.

### *Note Regarding Credit Ratings*

The foregoing information relating to Melancthon Wolfe Wind LP's credit rating is provided as it relates to the senior debt secured by our Melancthon 1 and 2 and Wolfe Island wind facilities. It is a condition to both: (i) issuing any additional bonds secured by our Melancthon 1 and 2 and Wolfe Island wind facilities under the existing indenture, and (ii) selling, transferring, leasing, conveying or otherwise disposing of all or substantially all of our Melancthon 1 and 2 and Wolfe Island wind facilities, that the rating ascribed to the senior amortizing bonds immediately prior to such proposed action will not be qualified, downgraded or withdrawn as a consequence of such proposed action, including that there will be no negative change in the trend for such rating as a consequence of such proposed action.

Credit ratings are intended to provide investors with an independent measure of credit quality of an issue of securities. The credit ratings accorded to the outstanding Melancthon Wolfe Wind LP securities by DBRS are not recommendations to purchase, hold or sell such securities inasmuch as such ratings do not comment as to market price or suitability for a particular investor. There is no assurance that the ratings will remain in effect for any given period or that a rating will not be revised or withdrawn entirely by DBRS in the future if, in its judgement, circumstances so warrant.

We have paid for rating services fees to DBRS, but have not paid for other rating agency services during the last two years.

## DIVIDENDS

Dividends on our Common Shares are at the discretion of the Board. In determining the payment and level of future dividends, the Board considers our financial performance, our results of operations, cash flow and needs, with respect to financing our ongoing operations and growth, balanced against returning capital to shareholders. The Board continues to focus on building sustainable earnings and cash flow growth. Currently, there are no restrictions preventing us from paying dividends.

TransAlta Renewables has declared the following dividends per share on its outstanding Common Shares:

Period	Dividend Payment Date	Dividend per Common Share
2017	January 31	\$0.07333
	February 28	\$0.07333
	March 31	\$0.07333
	April 28	\$0.07333
	May 31	\$0.07333
	June 30	\$0.07333
	July 31	\$0.07333
	August 31	\$0.07333
	September 29	\$0.07833 <sup>(1)</sup>
	October 31	\$0.07833
	November 30	\$0.07833
	December 29	\$0.07833
2018	January 31	\$0.07833
	February 28	\$0.07833
	March 29	\$0.07833
	April 30	\$0.07833
	May 31	\$0.07833
	June 29	\$0.07833
	July 31	\$0.07833
	August 31	\$0.07833
	September 28	\$0.07833
	October 31	\$0.07833
	November 30	\$0.07833
	December 31	\$0.07833
2019	January 31	\$0.07833
	February 28	\$0.07833
	March 29	\$0.07833
	April 30	\$0.07833
	May 31	\$0.07833
	June 28	\$0.07833
	July 31	\$0.07833
	August 30	\$0.07833
	September 30	\$0.07833
	October 31	\$0.07833
	November 29	\$0.07833
	December 31	\$0.07833
2020	January 31	\$0.07833
	February 28	\$0.07833
	March 31	\$0.07833 <sup>(2)</sup>
	April 30	\$0.07833 <sup>(2)</sup>
	May 29	\$0.07833 <sup>(2)</sup>
	June 30	\$0.07833 <sup>(2)</sup>

Notes:

- (1) On July 27, 2017, the Board declared and increased the dividend payable on each of September 29, 2017, October 31, 2017, and November 30, 2017, to shareholders of record at the close of business on September 1, 2017, October 2, 2017, and November 1, 2017, to \$0.07833 per Common Share.
- (2) Dividends have been declared but not yet paid.

## MARKET FOR SECURITIES

Our Common Shares are listed on the TSX under the symbol "RNW". The following table sets forth the reported high and low trading prices and trading volumes of our Common Shares as reported by the TSX for the periods indicated:

Month	Common Share Price (\$)		Volume
	High	Low	
<b>2018</b>			
March	13.63	12.15	7,363,759
April	14.03	13.51	6,638,636
May	13.90	13.21	5,544,079
June	14.18	13.42	4,724,213
July	14.34	13.58	5,050,143
August	13.90	12.69	5,846,776
September	13.72	13.05	6,481,758
October	14.22	13.55	6,237,617
November	15.13	14.14	7,496,730
December	15.79	14.72	9,742,882
<b>2019</b>			
January	16.73	15.32	8,617,693
February 1-27	18.25	16.46	9,907,145

## DIRECTORS AND OFFICERS

### *Directors*

The name, province or state and country of residence of each of our directors as at February 28, 2020, their respective position and office and their respective principal occupation during the five preceding years, are set out below. The year in which each director was appointed to serve on the Board is also set out below. Each director is appointed to serve until the next annual meeting of TransAlta Renewables or until his or her successor is elected or appointed.

Name, Province (State) and Country of Residence <sup>(1)</sup>	Year First Became Director	Principal Occupation
David W. Drinkwater <sup>(2)</sup> Ontario, Canada	2013	Mr. Drinkwater is a corporate director. Prior thereto, Mr. Drinkwater was a Senior Advisor to Rothschild Canada until December 31, 2015. Prior thereto, Mr. Drinkwater was the Chairman of Rothschild Canada from April 15, 2009 to July 1, 2013. Mr. Drinkwater is also currently a director, chair of the board and chair of the audit committee of Golden Birch Resources Inc. Mr. Drinkwater holds an LL.M. from the London School of Economics, an LL.B from Dalhousie University and a B.A. in Business Administration from the Richard Ivey School of Business at the University of Western Ontario. Mr. Drinkwater is Chair of the Board and a member of the Audit and Nominating Committee.

Name, Province (State) and Country of Residence <sup>(1)</sup>	Year First Became Director	Principal Occupation
Brett M. Gellner Alberta, Canada	2013	<p>Mr. Gellner is the former President of the Company. Mr. Gellner is also the Chief Development Officer of TransAlta and in such role he oversees strategic corporate investments, mergers and acquisitions as well as greenfield projects. Previously, Mr. Gellner was Chief Investment and Strategy Officer of TransAlta during 2018-2019, interim Chief Financial Officer of TransAlta during 2018 and Chief Financial Officer of TransAlta from 2010 to 2014. Prior to joining TransAlta, Mr. Gellner spent 12 years in investment banking covering the power, pipeline, midstream and forest products sectors. Mr. Gellner has a Master's degree specializing in economics from the University of Alberta and holds a Chartered Financial Analyst designation.</p> <p>Mr. Gellner does not serve on any committees of the Board.</p>
Allen R. Hagerman <sup>(2)</sup> Alberta, Canada	2013	<p>Mr. Hagerman is a corporate director. Prior to December 31, 2014, he was Executive Vice President of Canadian Oil Sands Limited, an oil sands mining and upgrading entity. Mr. Hagerman is currently a director and chair of the audit committee of Precision Drilling Corporation. Mr. Hagerman is also a director and chair of the audit committee of Tervita Corporation. He is also past President of Financial Executives Institute, Calgary Chapter, as well as a past Chair of the Alberta Children's Hospital Foundation. Previous board positions include lead director of Capital Power Income L.P., director of Syncrude Canada Ltd., Governor of the University of Calgary and a director of the Calgary Exhibition and Stampede. He is a fellow of the Institute of Chartered Accountants of Alberta and received their Distinguished Service Award. Mr. Hagerman is a Chartered Accountant and holds a Bachelor of Commerce from the University of Alberta and a Master of Business Administration from Harvard Business School. He also holds an ICD.D. certification from the Institute of Corporate Directors and has served on the executive committee of the ICD Calgary Chapter. Mr. Hagerman is a member of the Audit and Nominating Committee.</p>
Kathryn A. B. McQuade <sup>(2)</sup> Nevada, U.S.A.	2013	<p>Ms. McQuade is currently an independent business person and trustee for the Kathryn B. McQuade Foundation. Ms. McQuade served as Senior Advisor of Canadian Pacific Railway Company from November 1, 2012 to May 15, 2013. Prior thereto, Ms. McQuade served as the Chief Financial Officer of Canadian Pacific Railway Company from September 4, 2008 to her retirement on November 1, 2012. Ms. McQuade joined Canadian Pacific Railway Limited in June 2007 as Executive Vice President and Chief Operating Officer. Prior to joining Canadian Pacific Railway Limited, Ms. McQuade served as Executive Vice President - Planning and Chief Information Officer at Norfolk Southern Corporation where she spent 27 years in key information technology, strategic planning and finance leadership positions, including Vice-President, Internal Audit and Senior Vice-President, Finance. She currently serves as a director on Altria Group, Inc., a public tobacco corporation, where she is a member of the Audit Committee, Compensation Committee and Finance Committee. She also served as a director of several privately-held companies. From October 2013, Ms. McQuade is emerita status of the Board of Trustees of The College of William &amp; Mary Foundation. She previously served as a director of Shenandoah Life Insurance Company, TTX Company, Consolidated Rail Corporation and North West Upgrading Inc.</p> <p>Ms. McQuade holds a Bachelor of Business Administration in Accounting with a minor in Mathematics from the College of William and Mary in Virginia. She also completed the Advanced Management Program at Harvard.</p> <p>Ms. McQuade is the Chair of the Audit and Nominating Committee.</p>

Name, Province (State) and Country of Residence <sup>(1)</sup>	Year First Became Director	Principal Occupation
John Kousinioris Alberta, Canada	2017	<p>Mr. Kousinioris is the President of the Company. Mr. Kousinioris is also Chief Operating Officer at TransAlta, responsible for overseeing operations, shared services, commercial, trading, customer solutions, hedging and optimization at TransAlta. Previously, Mr. Kousinioris was Chief Growth Officer at TransAlta, responsible for overseeing growth as well as TransAlta's gas and renewables operations, business development, commercial, energy trading and marketing, and asset optimization, and Chief Legal and Compliance Officer and Corporate Secretary of TransAlta, responsible for directing TransAlta's legal affairs, government relations, regulatory compliance and corporate secretarial matters. Prior to joining TransAlta, Mr. Kousinioris was a partner and co-head of the corporate commercial department at Bennett Jones LLP. He has over 25 years of experience in securities law, mergers and acquisitions and corporate governance matters. Mr. Kousinioris has a B.A. in Business Administration from the Richard Ivey School of Business at the University of Western Ontario, a Masters of Business Administration degree from York University and a Bachelor of Laws degree from Osgoode Hall Law School at York University. He has also completed the Advanced Management Program at Harvard University.</p> <p>Mr. Kousinioris does not sit on any committees of the Board.</p>
Paul H. E. Taylor British Columbia, Canada	2013	<p>Mr. Taylor is the Principal of Taylor Advisory Services, a management consulting firm. He retired in July 2016 as the President and Chief Executive Officer of Western Financial Group, Western Canada's largest insurance brokerage company. Previously, Mr. Taylor served as TransAlta's President, U.S. Operations and Executive Vice-President of the Alberta based Canadian coal generation business until March 31, 2014. He was also responsible for leading the commercial coal and sustainability teams in both Canada and the U.S. In the late 1990s, while serving as TransAlta's Senior Vice-President, Corporate Development, he was involved in the establishment of TransAlta Power, L.P. His energy experience includes serving as President and Chief Executive Officer of NaiKun Wind Energy Group, an offshore wind development company. Mr. Taylor also has extensive public sector experience including serving as Chief of Staff to the Premier of British Columbia, British Columbia's Deputy Minister of Finance and Secretary to the Treasury Board and President and Chief Executive Officer of the Insurance Corporation of British Columbia and various roles within Alberta Treasury. Mr. Taylor has served on private and public sector boards including Western Financial Group, Western Life Assurance Company, Western Financial Insurance Company (PetSecure), NaiKun Wind Energy Group, BC Forestry Investment &amp; Innovation, TransAlta New Zealand, TransAlta Power Ltd., The Conference Board of Canada, the World Wildlife Fund – Canada and as the Chair of the Insurance Corporation of British Columbia.</p>

Notes:

1. The following directors are Canadian residents: David W. Drinkwater, Brett M. Gellner, Allen R. Hagerman, Paul H.E. Taylor and John Kousinioris.
2. Independent director within the meaning of NI 52-110 and National Instrument 58-101 - Disclosure of Corporate Governance Practices.

## ADDITIONAL INFORMATION REGARDING DIRECTORS AND OFFICERS

### *Conflicts of Interest*

Certain of our directors and executive officers are engaged in, and may continue to be engaged in, other activities in the industries in which we operate from time to time. The Management and Operational Services Agreement does not prohibit TransAlta from competing with the Company and its affiliates, except where any new activities proposed to be engaged in by TransAlta would give rise to, or would be reasonably likely to give rise to, a material adverse change in the

financial affairs of the Company unless the Company declined to pursue such activities and they have been, or are reasonably likely to be, undertaken by third parties.

The CBCA provides that in the event that an officer or director is a party to, or is a director or an officer of, or has a material interest in any person who is a party to, a material contract or material transaction or proposed material contract or proposed material transaction, such officer or director shall disclose the nature and extent of his or her interest and shall refrain from voting to approve such contract or transaction, unless otherwise provided under the CBCA. To the extent that conflicts of interest arise, such conflicts will be resolved in accordance with the provisions of the CBCA.

Under the Management and Operational Services Agreement, in the event that the interests of TransAlta come into material conflict with the interests of the Company, TransAlta must give written notice to the Company setting out the particulars of the conflict, and the independent directors of the Company will be responsible to make decisions relating to the conflict matter. The decision and any determinations made by the independent directors of the Company will be the actions taken by TransAlta Renewables.

The Management and Operational Services Agreement also provides that TransAlta may not, without first obtaining the approval of a majority of the independent members of the Board, (i) dispose of any material assets or equipment which are used in operating or maintaining the business of the Company, other than in the ordinary course of business or as provided for in the annual management plan; or (ii) enter into any transaction for and on behalf of the Company or an affiliate thereof with TransAlta or an affiliate of TransAlta except relating to the delegation of TransAlta's responsibilities under the Management and Operational Services Agreement; or (iii) provide any consent or waiver of contractual terms or conditions in favour of or for the benefit of TransAlta or any of its affiliates pursuant to any contract or agreement between TransAlta or any of its affiliates and the Company. Further, TransAlta may not materially deviate from an annual management plan without prior approval of a majority of the Board, unless required to safeguard life or property or minimize economic loss to the Company's business and time does not reasonably permit TransAlta to obtain the required written approval. Finally, TransAlta may not enter into or commit to any transaction that requires the approval of the independent directors without obtaining such approval.

As at the date hereof, the Company is not aware of any existing or potential material conflicts of interest between the Company and any director or officer of the Company.

### *Indebtedness*

The Company is not aware of any individuals who are either current or former executive officers, directors or employees of the Company and who have indebtedness outstanding as at the date hereof (whether entered into in connection with the purchase of securities of the Company or otherwise) that is owing to: (i) the Company, or (ii) another entity where such indebtedness is the subject of a guarantee, support agreement, letter of credit or other similar arrangement or understanding provided by the Company.

### *Indemnification and Insurance*

Pursuant to the Management and Operational Services Agreement, TransAlta has acquired and maintains liability insurance for its directors and officers, as well as those of its subsidiaries, including the Company. There have been no claims made or paid under this insurance to date.

The Company has entered into indemnification agreements with its directors and officers. The indemnification agreements require that the Company indemnify and hold the indemnitees harmless to the greatest extent permitted by law for liabilities arising out of the indemnitees' service to the Company as directors and officers, if the indemnitees acted honestly and in good faith with a view to the best interests of the Company and, with respect to criminal or administrative actions or proceedings that are enforced by monetary penalty, if the indemnitee had no reasonable grounds to believe that his or her conduct was unlawful. The indemnification agreements also provide for the advancement of defence expenses to the indemnitees by the Company.

## *Officers*

The name, province or state and country of residence of each of our officers as at February 28, 2020, their respective position and office and their respective principal occupation during the five preceding years, are set out below:

<b>Name</b>	<b>Principal Occupation</b>	<b>Date of Appointment</b>	<b>Residence</b>
John Kousiniotis	Mr. Kousiniotis is the President of the Company since November 2, 2017 and Chief Operating Officer of TransAlta since August 2019. Prior thereto Mr. Kousiniotis was the Chief Growth Officer of TransAlta since July 2018 and the Chief Legal and Compliance Officer and Corporate Secretary of TransAlta since December 2012. Prior thereto, Mr. Kousiniotis was a Partner and co-head of the Corporate Commercial Group at Bennett Jones LLP (law firm).	November 2, 2017	Alberta, Canada
Scott Jeffers	Mr. Jeffers is the Corporate Secretary of the Company. Mr. Jeffers is also Managing Director & Corporate Secretary of TransAlta. Prior to joining TransAlta, Mr. Jeffers was an associate at Bennett Jones LLP where he practiced corporate and commercial law with an emphasis on public market transactions, including debt and equity financing and mergers and acquisitions.	November 2, 2017	Alberta, Canada
Kathryn Higgins	Ms. Higgins is Managing Director and Corporate Controller of the Company. She is also Managing Director and Corporate Controller of TransAlta since May 2019. Prior thereto, Ms. Higgins was Managing Director of TransAlta since June 2018, Manager, Finance of TransAlta since October 2016, and Manager, EM Back Office at TransAlta since March 2013.	May 16, 2019	Alberta, Canada
Brent Ward	Mr. Ward is Chief Financial Officer of the Company. Prior thereto, he was the Managing Director and Treasurer of the Company since May 2017. Mr. Ward is also the Managing Director and Treasurer of TransAlta since April 24, 2017. Prior thereto, Mr. Ward was the Manager, Corporate Finance of TransAlta since July 2015. Prior thereto, Mr. Ward was the Director of Corporate Finance and Investor Relations since February 2013 and Director, Treasury of TransAlta since January 2011.	May 16, 2019	Alberta, Canada
Aron Willis	Mr. Willis is the Senior Vice President, Growth and Commercial of the Company. Mr. Willis was a director of the Company from January 31, 2017 until November 2, 2017. Mr. Willis is the Senior Vice President, Growth of TransAlta since August 2019. Prior thereto he was Senior Vice President, Gas and Renewables of TransAlta since January 2016. Prior thereto, Mr. Willis was the Managing Director, Australia of TransAlta, accountable for overseeing the Australia operations. Prior thereto, he was Vice-President, Australia of TransAlta until September 2015. Prior thereto, he was Country Manager, Australia of TransAlta since July 2007.	February 1, 2017	Alberta, Canada

## *Director and Officer Shareholdings*

As of December 31, 2019, the directors and executive officers of TransAlta Renewables, as a group, beneficially owned, directly or indirectly, or exercised control or direction over, less than one per cent of our outstanding Common Shares.

## INTERESTS OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Except as otherwise disclosed herein, no director or executive officer of the Company, no person or company that is the direct or indirect beneficial owner of, or who exercises control or direction over more than ten per cent of our Common Shares, and no associate or affiliate of any of them, has or has had any material interest, direct or indirect, in any transaction involving TransAlta Renewables since the date of incorporation or in any proposed transactions that have materially affected or will materially affect us. See "General Development of the Business".

## INDEBTEDNESS OF DIRECTORS, EXECUTIVE OFFICERS AND SENIOR OFFICERS

Since the date of incorporation, there has been no indebtedness outstanding to the Company from any of our directors, executive officers, senior officers or associates of any such directors, nominees or senior officers.

## CORPORATE CEASE TRADE ORDERS, BANKRUPTCIES OR SANCTIONS

### *Corporate Cease Trade Orders*

No director, executive officer or controlling security holder of the Company is, as at the date of this Annual Information Form, or has been, within the past ten years before the date hereof, a director or executive officer of any other issuer that, while that person was acting in that capacity:

- (i) was the subject of a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation for a period of more than 30 consecutive days; or
- (ii) was subject to an event that resulted, after the person ceased to be a director or executive officer but that occurred while that person was acting in such capacity, in the company being the subject of a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation for a period of more than 30 consecutive days; or
- (iii) within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

### *Personal Bankruptcies*

No director, executive officer or controlling security holder of the Company has, within the ten years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold such person's assets.

### *Penalties or Sanctions*

No director, executive officer or controlling security holder of TransAlta Renewables has:

- (i) been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority, other than penalties for late filing of insider reports; or
- (ii) been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

## MATERIAL CONTRACTS

The following material contracts, other than those contracts entered into in the ordinary course of business, which the Company or any of its subsidiaries has entered into since January 1, 2019, or has entered into prior to January 1, 2019, but which contract is still in effect.



- a) Management and Operational Services Agreement – See "*Employee and Governance Matters – Management and Operational Services Agreement*".
- b) Governance and Cooperation Agreement – See "*Employee and Governance Matters – Governance and Cooperation Agreement*".
- c) Investor Liquidity Agreement – See "*Employee and Governance Matters – Investor Liquidity Agreement*".
- d) Investment Agreement – See "*Business of TransAlta Renewables – Investment Agreement – Australian Assets*".

## CONFLICTS OF INTEREST

Circumstances may arise where members of the Board serve as directors or officers of companies that are in competition to the interests of TransAlta Renewables. No assurances can be given that opportunities identified by such member of the Board will be provided to us. However, our policies provide that each director and executive officer must comply with the disclosure requirements of the CBCA regarding any material interest. If a declaration of material interest is made, the declaring director shall not vote on the matter if put to a vote of the Board. In addition, the declaring director and executive officer may be requested to recuse himself or herself from the meeting when such matter is being discussed.

Under the Management and Operational Services Agreement, in the event that the interests of TransAlta come into material conflict with the interests of the Company, TransAlta must give written notice to the Company setting out the particulars of the conflict, and the independent directors of the Company will be responsible to make decisions relating to the conflict matter. The decision and any determinations made by the independent directors of the Company will be the actions taken by TransAlta Renewables.

## LEGAL PROCEEDINGS AND REGULATORY ACTIONS

TransAlta Renewables is occasionally named as a party in claims and legal proceedings that arise during the normal course of our business. We review each of these claims, including the nature of the claim, the amount in dispute or claimed and the availability of insurance coverage. There can be no assurance that any particular claim will be resolved in our favour or that such claim may not have a material adverse effect on TransAlta Renewables.

On August 1, 2017, FMG notified TransAlta and the Company, that, in its view, the South Hedland facility had not yet satisfied the requisite performance criteria under the South Hedland PPA. In TransAlta's view, all conditions to establish commercial operations have been fully satisfied under the terms of the South Hedland PPA. On November 13, 2017, TransAlta received a notice from FMG purporting to terminate the South Hedland PPA. TransAlta's view is that the purported termination is invalid. TransAlta continues to invoice FMG for monthly capacity in accordance with the terms of the South Hedland PPA. The dispute is currently being litigated in the Supreme Court of Western Australia.

While we are not directly involved in the ongoing dispute with FMG over the purported termination of the South Hedland PPA, the results of the litigation could impact the finance income received as a result of our economic interest in the Australian Assets. TransAlta sued FMG, seeking payment of amounts invoiced and not paid under the South Hedland PPA, as well as a declaration that the PPA is valid and in force. FMG, on the other hand, seeks a declaration that the PPA was lawfully terminated. This matter is scheduled to proceed to trial beginning June 15, 2020.

## TRANSFER AGENT AND REGISTRAR

Computershare Trust Company of Canada is the transfer agent and registrar of the Company. The Company's Common Shares are transferable in Calgary and Toronto.

## INTERESTS OF EXPERTS

The Company's auditors are Ernst & Young LLP, Chartered Professional Accountants, 2200, 215 – 2 Street, S.W., Calgary, Alberta, T2P 1M4.

Our auditors, Ernst & Young LLP, are independent within the meaning of the Chartered Professional Accountants of Alberta Rules of Professional Conduct and have complied with the U.S. Securities and Exchange Commission's rules on auditor independence.

## ADDITIONAL INFORMATION

Additional information in relation to TransAlta Renewables may be found under TransAlta Renewables' profile on SEDAR at [www.sedar.com](http://www.sedar.com).

Additional information including directors' and officers' remuneration and indebtedness, principal holders of our securities and securities authorized for issuance under equity compensation plans (all where applicable), is contained in our Management Proxy Circular for the most recent annual meeting of shareholders that involved the election of directors and can be found under TransAlta Renewables' profile on SEDAR at [www.sedar.com](http://www.sedar.com).

Additional financial information is provided in our audited consolidated financial statements as at and for the year ended December 31, 2019, and in the related management's discussion and analysis, each of which is incorporated by reference in this AIF. See "*Documents Incorporated by Reference*".

## AUDIT AND NOMINATING COMMITTEE

### *Mandate of the Audit and Nominating Committee*

The Board's Audit and Nominating Committee ("Audit Committee") consists of three directors, being Kathryn A.B. McQuade (Chair), David W. Drinkwater and Allen R. Hagerman, all of whom are independent and financially literate for the purposes of NI 52-110. Each of the members of the Audit Committee possesses: (i) an understanding of the accounting principles used by the Company to prepare its financial statements; (ii) the ability to assess the general application of such accounting principles in connection with the accounting for estimates, accruals and reserves; (iii) experience preparing, auditing, analyzing or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements, or experience actively supervising one or more individuals engaged in such activities; and (iv) an understanding of internal controls and procedures for financial reporting. The Audit Committee meets at least once each financial quarter to fulfil its mandate.

The specific responsibilities of the Audit Committee are set out in the Audit and Nominating Committee Charter, a copy of which is attached to this Annual Information Form as Appendix "A". The Audit Committee's primary role is to assist the Board in fulfilling its oversight responsibilities regarding the Company's financial reporting, internal controls, and risk identification and management processes.

The Audit Committee is directly responsible for overseeing the work of the external auditor engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services, including the resolution of disagreements between the external auditor and management. The external auditor reports directly to the Audit Committee. The Audit Committee is also responsible for reviewing and approving the Company's hiring policies regarding current and former partners and employees of the external auditor. In addition, the Audit Committee pre-approves all non-audit services undertaken by the external auditor.

The Audit Committee is responsible for establishing and maintaining satisfactory procedures for the receipt, retention and treatment of complaints and for the confidential, anonymous submission by employees of the Company regarding any questionable accounting or auditing matters. The Audit Committee is accountable to the Board and will provide a report to the Board at each regularly scheduled Board meeting outlining the results of the Audit Committee's activities and any reviews it has undertaken.

### *Audit Committee Charter*

The charter of the Audit Committee is attached as Appendix "A".

### *Relevant Education and Experience of Audit Committee Members*

The following is a brief summary of the education or experience of each member of the Audit Committee that is relevant to the performance of their responsibilities as a member of the Audit Committee, including any education or experience that has provided the member with an understanding of the accounting principles that we use to prepare our annual and interim financial statements.

Name of Audit Committee Member	Relevant Education and Experience
Kathryn A.B McQuade	Ms. McQuade holds a Bachelor of Business Administration in Accounting with a minor in Mathematics from the College of William and Mary in Virginia. She also completed the Advanced Management Program at Harvard. Ms. McQuade has served as Chief Financial Officer, Chief Operations Officer and Chief Information Officer of public companies.
David W. Drinkwater	Mr. Drinkwater holds an LL.M. from the London School of Economics, an LL.B. from Dalhousie University and a B.A. in Business Administration from the Richard Ivey School of Business at the University of Western Ontario. Mr. Drinkwater has been the Acting Chief Financial Officer and the Chief Financial Officer of public companies and until recently was a Senior Advisor to a global financial advisory group. Mr. Drinkwater is also the Chair of the Audit Committee of Golden Birch Resources Inc. and previously served on the Audit Committee of Hollinger Inc.
Allen R. Hagerman	Mr. Hagerman is a Chartered Accountant and holds a Bachelor of Commerce from the University of Alberta and a Master of Business Administration from Harvard Business School. He also holds an ICD.D. certification from the Institute of Corporate Directors and is a fellow of the Institute of Chartered Accountants of Alberta. Mr. Hagerman is also a past member of the Financial Executives Institute and a past President of Financial Executives Institute, Calgary Chapter. Mr. Hagerman has been the Chief Financial Officer of a number of public companies and is a director and chair of the audit committee of two public companies.

### *Fees Paid to Ernst & Young LLP*

At no time since January 2019 was a recommendation of the Audit and Nominating Committee to nominate or compensate an external auditor not adopted by the Board.

For the years ended December 31, 2019, and December 31, 2018, Ernst & Young LLP and its affiliates were paid \$905,580 and \$891,147 respectively, as detailed below:

<b>Ernst &amp; Young LLP</b>			
Year Ended December 31		<b>2019</b>	<b>2018</b>
Audit Fees	\$	793,830	816,397
Audit-related fees	\$	111,750	74,750
Tax fees		-	-
All other fees		-	-
<b>Total</b>	<b>\$</b>	<b>905,580</b>	<b>891,147</b>

No other audit firms provided audit services in 2019 or 2018.

The nature of each category of fees is described below:

#### **Audit Fees**

Audit fees are for professional services rendered for the audit and review of our annual financial statements or services provided in connection with statutory and regulatory filings or engagements and providing comfort letters associated with securities documents.

**Audit-Related Fees**

Assurance and related services that are reasonably related to the performance of the audit or review of our financial statements that are not included under "Audit Fees". Audit-Related fees include statutory audits, pension audits and other compliance audits.

**Tax Fees**

Nil.

**All Other Fees**

Nil.

*Pre-Approval Policies and Procedures*

The Audit Committee has adopted a policy that prohibits TransAlta, as our manager, from engaging the auditors for "prohibited" categories of non-audit services. Pre-approval must be obtained from the Audit Committee for permitted categories of non-audit services. This policy also provides authority to the Chair of the Audit Committee to approve such non-audit services during the quarter and report such approval to the committee at its next regularly scheduled meeting. The Audit Committee also granted management the authority to approve de minimus permissible non-audit services (which are in the aggregate no greater than five per cent of the total fees paid to the external auditors, or \$125,000), provided such services are reported to the Audit Committee at its next scheduled meeting.

# APPENDIX "A" - AUDIT AND NOMINATING COMMITTEE CHARTER

## TRANSALTA RENEWABLES INC.

### AUDIT AND NOMINATING COMMITTEE CHARTER

#### A. ESTABLISHMENT OF COMMITTEE AND PROCEDURES

##### 1. *Composition of Committee*

The Audit and Nominating Committee (the "Committee") of the Board of Directors (the "Board") of TransAlta Renewables Inc. (the "Company") shall consist of not less than three directors. No member of the Committee shall be an officer or employee of the Company nor shall they be an officer or employee of TransAlta Corporation (the "Manager"). The Committee shall comply with the independence and financial literacy requirements set forth in Part 3 of Canadian Securities Regulators' National Instrument 52-110 Audit Committees ("NI 52-110"). Determinations as to whether the Committee and each member of the Committee satisfy the requirements of Part 3 of NI 52-110 and this Section A.1 shall be made by the Board.

##### 2. *Appointment of Committee Members*

Members of the Committee, who shall be chosen solely from the Board's independent members, shall be appointed by the Board following each annual meeting of shareholders or from time to time as required, and shall hold office until the next annual meeting of shareholders, or until their successors are earlier appointed, or until they cease to be directors of the Company.

##### 3. *Vacancies*

Where a vacancy occurs at any time in the membership of the Committee resulting in the membership being reduced to less than three members, the Board shall take action to fill the vacancy.

##### 4. *Committee Chair*

The Board shall, among the members of the Committee, appoint a Chair for the Committee. If the Chair of the Committee is not present at any meeting of the Committee, one of the members of the Committee who is present at the meeting shall be chosen by the Committee to preside at the meeting.

##### 5. *Secretary of Committee*

The Committee shall appoint a Secretary who need not be a director of the Company.

##### 6. *Meetings*

The Chair of the Committee may call a meeting of the Committee. The Committee shall meet at least quarterly and at such other times during each year as it deems appropriate. In addition, the Chair of the Committee or any two members may call a special meeting of the Committee at any time. The Committee shall also meet in separate executive sessions at the end of each in person meeting and may at its discretion do so at the end of any meeting, however such may be conducted. As it deems appropriate, members of the Committee shall also meet separately with the internal or external auditors or any member of management.

##### 7. *Quorum*

A majority of the members of the Committee, present in person or by telephone or other telecommunication device that permits all persons participating in the meeting to speak to each other, shall constitute a quorum.

##### 8. *Notice of Meetings*

Notice of the time and place of every meeting shall be given in writing (including by way of written facsimile communication or email) to each member of the Committee at least 48 hours prior to the time fixed for such meeting; provided, however, that a member may in any manner waive notice of a meeting, and attendance of a member at a meeting constitutes a waiver of notice of the meeting, except where a member attends for the express purpose of

objecting to the transaction of any business on the ground that the meeting is not lawfully called. Notice of every meeting shall also be provided to the external and internal auditors.

#### *9. Attendance at Meetings*

At the invitation of the Chair of the Committee, other Board members and officers of the Company or, if required, officers and employees of the Manager, the external auditors, and other experts or consultants may attend meetings of the Committee.

#### *10. Procedure, Records and Reporting*

Subject to any statute or the articles and by-laws of the Company, the Committee shall fix its own procedures at meetings, keep records of its proceedings and report to the Board generally at the next scheduled meeting of the Board.

#### *11. Review of Charter and Evaluation of Committee*

The Committee shall evaluate its performance and review and assess the adequacy of its Charter at least annually or otherwise as it deems appropriate and if necessary propose changes to the Board for review and approval.

#### *12. Outside Experts and Advisors*

The Committee Chair, on behalf of the Committee, or any of its members is authorized, at the expense of the Company, when deemed necessary or desirable, to retain independent counsel, outside experts and other advisors to advise the Committee independently on any matter. The retention of such counsel, expert or advisor in no way requires the Committee to act in accordance with the recommendations of such counsel, expert or advisor.

## **B. DUTIES AND RESPONSIBILITIES OF THE CHAIR**

The fundamental responsibility of the Chair of the Committee is to effectively manage the duties of the Committee.

The Chair is responsible for:

1. ensuring that the Committee is properly organized so that it functions effectively and meets its obligations and responsibilities;
2. establishing the frequency of Committee meetings, duly convening the same and confirming that a quorum is present when required;
3. working with management and the Manager on the development of agendas and related materials for the meetings;
4. ensuring the Committee has sufficient information to permit it to properly make decisions when decisions are required;
5. making suggestions and providing feedback to management and the Manager regarding information that is or should be provided to the Committee to permit it to properly make decisions when decisions are required;
6. communicating with the Manager regarding financial reporting issues, internal controls and accounting matters;
7. providing leadership to the Committee and assisting the Committee in reviewing and monitoring its responsibilities;
8. reporting to the Board on the recommendations and decisions of the Committee; and
9. acting as Chair at meetings of the Committee.

## **C. MANDATE OF THE COMMITTEE**

The Committee provides assistance to the Board in fulfilling its oversight responsibilities with respect to: (i) the integrity of the Company's financial statements and financial reporting process; (ii) the systems of internal financial controls established by the Manager; (iii) the risk identification assessment conducted by the Manager and the programs established by the Manager in response to such assessment; (iv) the internal audit function; (v) compliance with accounting and finance based legal and regulatory requirements; and (vi) the external auditors' qualifications,

independence and performance. In so doing, it is the Committee's responsibility to maintain an open avenue of communication between it and the external auditors, the internal auditors, management and the Manager of the Company.

The function of the Committee is oversight. Management and the Manager are responsible for the preparation, presentation and integrity of the interim and annual financial statements and related disclosure documents. Management and the Manager are also responsible for maintaining appropriate accounting and financial reporting policies and systems of internal controls and procedures to comply with accounting standards, applicable laws and regulations which provide reasonable assurances that assets are safeguarded and transactions are authorized, executed, recorded and reported properly.

The Committee is also responsible for the identification and recommendation of individuals to the Board for nomination as members of the Board and its committees.

The Committee's role is to provide meaningful and effective oversight so that the Company's assets are protected and safeguarded within reasonable business limits. The Committee reports to the Board on its risk oversight responsibilities.

## D. DUTIES AND RESPONSIBILITIES OF THE COMMITTEE

### 1. *Audit and Financial Matters*

#### A. **Duties and Responsibilities Related to the External Auditors Qualifications**

- (a) The Committee shall have direct responsibility for the compensation and oversight of the external auditors including nominating the external auditors to the Board for appointment by the shareholders at the Company's annual meeting. In performing its function, the Committee shall:
  - (i) review annually the experience and qualifications of the external auditors' senior personnel who are providing audit services to the Company and the quality control procedures of the external auditors, including obtaining confirmation that the external auditors are in compliance with required regulatory requirements;
  - (ii) review and approve annually the external auditors audit plan;
  - (iii) review and approve annually the basis and amount of the external auditors' fees and confirm with the Company's Chief Financial Officer that appropriate funding for payment of compensation to the external auditors has been provided for;
  - (iv) review and discuss annually with the external auditors all relationships that the external auditors and their affiliates have with the Company and its affiliates in order to determine the external auditors' independence, including, without limitation, (A) requesting, receiving and reviewing, at least annually, a formal written statement from the external auditors delineating all relationships that may reasonably be thought to bear on the independence of the external auditors with respect to the Company, (B) discussing with the external auditors any relationships or services that the external auditors believe may affect their objectivity and professional skepticism; (C) evaluating the communication and interaction with the external auditor including quality of service consideration; and (D) recommending that the Board take appropriate action in response to the external auditors' report to satisfy itself of the external auditors' independence;
  - (v) in the year preceding the change of the lead (or coordinating) audit partner (having primary responsibility for the audit), and in any event not less than every five years, perform a comprehensive review of the external auditor which takes into consideration (A) the impact of the tenure of the audit firm on audit quality, trends in the audit firm's performance and expertise in the industry, incidences of independence threats and the effectiveness of safeguards to mitigate those threats, (B) the responsiveness of the audit firm to changes in the entity's business and suggestions for improvement from regulators, the audit committee and/or management, (C) the consistency and rigor of the professional skepticism applied by the external auditor, and the quality of the engagement team and its communications, review of the Canadian Public Accountability Board inspection findings since the previous comprehensive review and how the audit firm responded to these findings, and following this comprehensive review, determine whether the audit firm should be nominated to the Board as the external auditor for appointment by the shareholders at the Company's next general annual meeting;

- (vi) provide the external auditors with direct access to the Committee at all times, and upon a change to the external audit firm or a change of the lead (or coordinating) audit partner (having primary responsibility for the audit): (A) inform the external auditors and the Manager that the external auditors shall have direct access to the Committee at all times, and (B) instruct the external auditors that they are ultimately accountable to the Committee; and
- (vii) at least annually, obtain and review the external auditors' report with respect to the auditing firm's internal quality-control procedures, any material issues raised by the most recent internal quality-control review or peer review of the auditing firm, any inquiry or investigation by governmental or professional authorities within the preceding five years undertaken respecting one or more independent audits carried out by the external auditors, and any steps taken to deal with any such issues.

**B. Duties and Responsibilities Related to Financial Reporting and the Audit Process**

- (a) Pre-approve all audit related services including all non-prohibited non-audit services to be provided by the external auditors. The Chair of the Committee may approve, between meetings, all audit related services including all non-prohibited non-audit services to be provided by the external auditors, and shall report to the Committee at its next scheduled meeting the exercise of this delegated authority;
- (b) Review with management, the Manager and the external auditors the Company's financial reporting documents and processes in connection with the annual audit and the preparation of the financial statements, including, without limitation, the annual audit plan of the external auditors, the judgment of the external auditors as to the quality, not just the acceptability, of and the appropriateness of the Company's accounting principles as applied in its financial reporting and the degree of aggressiveness, conservatism or discretion applied by the Company with respect to the accounting principles and underlying estimates adopted;
- (c) Review with management, the Manager and the external auditors all financial statements and financial disclosure; and
  - (i) recommend to the Board for approval the Company's audited annual financial statements including the notes thereto and the related Management's Discussion and Analysis;
  - (ii) review any report or opinion to be rendered in connection therewith and report to the Board as required;
  - (iii) review with the external auditors the cooperation they received during the course of their review and their access to all records, data and information requested;
  - (iv) discuss with management, the Manager and the external auditors all significant transactions which are not a regular part of the Company's business;
  - (v) review the processes in the formulating of sensitive accounting estimates and the reasonableness of the estimates;
  - (vi) review with management, the Manager and the external auditors any changes in accounting principles, practices or policies considering their applicability to the business and financial impact;
  - (vii) review with management, the Manager and the external auditors alternative treatments of financial information within generally accepted accounting principles, the use of such alternative treatments and that preferred by the external auditors; and
  - (viii) satisfy itself that there are no unresolved issues between management, the Manager and the external auditors that could reasonably be expected to materially affect the financial statements.
- (d) Review with management, the Manager and the external auditors the Company's interim financial statements, including the notes thereto, the related "Management's Discussion and Analysis", the related earnings release, and approve their release to the public as required;
- (e) Review quarterly with management, the Manager, and as necessary, outside legal advisors and the Company's external auditors, the effectiveness of the Company's internal controls to confirm that the Company is in compliance with its policies and legal and regulatory requirements;



- (f) Discuss with management, the Manager and the external auditors any correspondence from or with regulators or governmental agencies, any employee complaints or any published reports that raise material issues regarding the Company's financial statements or accounting policies; and
- (g) Review with the CEO and Chief Financial Officer (the "CFO") the processes undertaken by them and the Manager, to satisfy the requirements for certification relating to the Company's periodic and annual reports to be filed with securities regulators, to confirm that the information required to be disclosed is recorded, processed, summarized and reported within the time periods specified for the reporting period. Obtain assurances from the CEO and CFO as to the adequacy and effectiveness of the Company's disclosure controls and procedures and systems of internal control over financial reporting and that any fraud involving any employees of the Manager or the officers of the Company is reported to the Committee.

**C. Duties and Responsibilities Related to Financial Planning**

- (a) Review and recommend to the Board for approval the Company's issuance and redemption of all securities, bonds and other financial instruments (including the review of all public filings to effect any of the issuances or redemptions), financial commitments and limits, and any material changes underlying any of these commitments;
- (b) Review annually the Company's annual tax and monitor its approach to tax strategy, including tax reserves and potential reassessments and audits; and
- (c) Receive regular updates with respect to the Company's financial obligations, loans, credit facilities, credit position and financial liquidity.

**2. Governance**

- (a) On behalf of the Committee, the Chair shall review all public disclosure of material financial information extracted or derived from the Company's financial statements prior to dissemination to the public;
- (b) Review with management and the Manager at least annually the approach and nature of financial information and earnings guidance to be disclosed to analysts and rating agencies;
- (c) Review quarterly with management and the Manager, and, if necessary, outside legal advisors, significant legal, compliance or regulatory matters that may have a material effect on the Company's financial statements;
- (d) Discuss with the external auditors their perception of the Company's financial and accounting personnel, any recommendations which the external auditors may have, including those contained in the management letter, with respect to improving internal financial controls, choice of accounting principles or management reporting systems, and review all management letters from the external auditors together with written responses thereto;
- (e) Review with management and the Manager, the external auditors and, as necessary, external legal counsel, any litigation, claim or contingency, including tax assessments, that could have a material effect upon the financial position of the Company, and the manner in which these may be or have been disclosed in the financial statements;
- (f) Receive annually an IT update from the Manager, focused on IT systems which support the business including cyber security programs in place to address potential cyber threats;
- (g) Review annually the fees of the Manager to confirm compliance with the Management and Operational Services Agreement;
- (h) Review the Manager's processes relating to the assessment of potential fraud, programs and controls to mitigate the risk of fraud and the processes put in place for monitoring the risks within targeted areas;
- (i) Require the Manager to maintain procedures for the confidential receipt, retention and treatment of complaints by employees, officers, contractors or other stakeholders of the Manager and those of the Company regarding accounting, internal and disclosure controls, auditing or legal violations;
- (j) Review all incidents, complaints or information reported through the Company's Ethics Help Line relating to the Company and follow-up with Management to confirm that the matter is investigated as required;

- (k) Review the Manager's policy with respect to its hiring policies for employees or former employees of the external auditors; and
- (l) Report annually to shareholders on the work of the Committee during the year.

### 3. *Internal Audit*

- (a) Review and consider, as appropriate, any significant reports and recommendations made by management's and/or the Manager's internal audit team relating to the assets of the Company;
- (b) Review annually the scope and plans for the work of the internal audit group, with respect to the Company's assets and require management and/or the Manager to undertake the internal audit work required to safeguard the assets of the Company;
- (c) Recognize and advise management and/or the Manager that their internal auditors shall have unfettered access to the Committee, and shall meet in camera with such internal auditor; and
- (d) Review with management and the Manager the adequacy of the systems of internal control and procedures.

### 4. *Board Composition and Nomination*

The Manager and the Company entered into the Governance and Cooperation Agreement (the "Governance Agreement") that provides, among other things, that the Manager shall be entitled to nominate a majority of the directors for so long as it holds greater than 35 per cent of the issued and outstanding common shares in the capital of the Company. The nominees of the Manager to the Board may be directors, officers or employees of the Manager or its affiliates, or other persons, at the Manager's discretion. Subject to the rights of the Manager pursuant to the Governance Agreement, the Committee shall:

- (a) Review, from time to time, the size, composition and profile of the Board, taking into account succession planning, geographical representation, disciplines, professional experience, strategy and direction of the Company and other matters it considers appropriate and which may affect the dynamics of the boardroom, and recommend to the Board any changes to the size, composition or profile of the Board as determined appropriate by the Committee.
- (b) Review and propose to the Board for approval, criteria for selecting new directors, after considering the competencies and skills the Board possesses, as a whole, the competencies and skills of each director, and the needs of the Company going forward, including its strategic direction, and determine from this review the competencies and skills that each new nominee should bring to the Board.
- (c) In selecting candidates for the Board, the Committee shall consider individuals from diverse backgrounds, having regard to gender, ethnicity, age, business experience, professional expertise, personal skills, stakeholder perspectives and geographic background. These factors will be considered based on the direction of the Company and with the goal of creating a diverse board that together can provide insight, oversight and foresight to benefit the Company.
- (d) Annually prepare and circulate a questionnaire which identifies the skills, education and experience of each current director and those factors needed to promote diversity and to lead the strategic direction of the Company, and present such results to the Board.
- (e) Review annually the qualifications of person(s) proposed for election to the Board.

## E. COMPLIANCE AND POWERS OF THE COMMITTEE

- (a) The responsibilities of the Committee comply with applicable Canadian laws and regulations, such as the rules of the Canadian Securities Administrators, and with the disclosure and listing requirements of the Toronto Stock Exchange, as they exist on the date hereof. This Charter is reviewed annually to confirm compliance with such standards.
- (b) The Committee may, at the request of the Board or on its own initiative, investigate such other matters as are considered necessary or appropriate in carrying out its mandate.

## APPENDIX "B" GLOSSARY OF TERMS

This Annual Information Form includes the following defined terms:

"**AEMO**" means the Australian Energy Market Operator.

"**AESO**" means the Alberta Electric System Operator.

"**AUC**" means the Alberta Utilities Commission.

"**AU\$**" means Australian dollars.

"**Australian Assets**" refers to (1) the Parkeston plant ("Parkeston"), (2) the four natural-gas and diesel-fired generation facilities that comprise Southern Cross Energy ("Southern Cross"), (3) the Fortescue River Gas Pipeline, and (4) South Hedland, and, (5) prior to being repurchased by FMG on November 1, 2017, the Solomon facility ("Solomon").

"**Australian Loan Tracking Shares**" means the Class E Preferred Shares in the capital of TA Power, the terms of which effectively entitle the holders of such preferred shares to dividends equal to the interest payments on the amortizing term loan payable by TEA to another subsidiary of TransAlta, and are redeemed when scheduled or other principal repayments occur on this underlying loan.

"**Australian Tracking Preferred Shares**" means the Class A Preferred Shares in the capital of TA Energy, the terms of which, together with the preferred shares in the capital of TEA held by the Company, effectively entitle the holders of such preferred shares with an economic interest based on the cash flows broadly equal to the underlying net distributable profits of TEA.

"**Balancing Pool**" means the Balancing Pool that was established in 1999 by the Government of Alberta to help manage the transition to competition in Alberta's electricity industry.

"**BC Hydro**" means the British Columbia Hydro and Power Authority.

"**Big Level and Antrim Tracking Preferred Shares**" means the Class B Preferred Shares of TA Power, the terms of which effectively entitle the holders of such preferred shares to the free cash flow from the Big Level and Antrim wind farms through dividends, based on the pre-tax net earnings generated by the Big Level and Antrim wind farms, and the return of capital.

"**Board**" or "**Board of Directors**" means the board of directors of the Company.

"**Canadian Assets**" refers to (1) the Sarnia Plant, (2) the Le Nordais wind facility, and (3) the Ragged Chute hydro facility.

"**CBCA**" means the *Canada Business Corporations Act*.

"**CCIR**" means the *Carbon Competitiveness Incentive Regulation*, a GHG regulatory scheme that replaced the Specified Gas Emitters Regulation ("SGER") on January 1, 2018.

"**CHD**" means Canadian Hydro Developers, Inc.

"**Class B Shares**" means the class B shares in the capital of the Company.

"**Common Shares**" means common shares in the capital of the Company.

"**Company**" means TransAlta Renewables Inc.

"**Contribution Agreement**" means the contribution agreement dated the 7<sup>th</sup> day of May, 2015, among the Company, TEA, TA Energy and TEC L.P.

"**CPI**" means the consumer price index published monthly in Statistics Canada Publication 62-001-X "The Consumer Price Index".

"**Demand Registration**" has the meaning ascribed to such term under the heading "*Employee and Governance Matters - Investor Liquidity Agreement*" in this AIF.

"**ecoENERGY**" means ecoENERGY for Renewable Power, an incentive program sponsored by the Canadian federal government to encourage the development of clean power generation projects.

"**EcoLogo**" means Environment Canada's Environmental Choice program. EcoLogo certification is granted to products with environmental performance that meets or exceeds all government, industrial safety and performance standards; thus, offering public assurance that the facilities from which power is generated are low impact and non-polluting.

"**EPCs**" means Emission Performance Credits.

"**FIT**" or "**FITs**" means feed-in tariffs.

"**FMG**" means Fortescue Metals Group Limited.

"**G&A Reimbursement Fee**" means the annual fee we pay TransAlta in connection with the services provided under the Management and Operational Services Agreement, which fee is meant to cover TransAlta's management, administrative, accounting, planning and other head office costs associated with providing services to us under the Management and Operational Services Agreement.

"**Governance and Cooperation Agreement**" means the governance and cooperation agreement between the Company and TransAlta dated August 9, 2013.

"**GW**" means gigawatt, or 1,000 MW.

"**IESO**" means Independent Electricity System Operator.

"**IFRS**" means the International Financial Reporting Standards as issued by the International Accounting Standards Board.

"**Initial Assets**" means the wind and hydroelectric power generation assets held by Western Sustainable Power and CHD indirectly acquired by the Company pursuant to the Purchase and Sale Agreement.

"**Investor Liquidity Agreement**" means the investor liquidity agreement between TransAlta and the Company dated August 9, 2013.

"**IPPs**" means independent power producers.

"**kW**" means kilowatt, or 1,000 watts.

"**Lakeswind Tracking Preferred Shares**" means the Class D Preferred Shares of TA Power, the terms of which effectively entitle the holders of such preferred shares to the free cash flow from the Lakeswind wind farm through dividends, based on the pre-tax net earnings generated by the Lakeswind wind farm, and the return of capital.

"**LTCs**" means long-term contracts.

"**Management and Operational Services Agreement**" means the management, administrative and operational services agreement between the Company and TransAlta dated August 9, 2013, as amended.

"**Mass Solar Tracking Preferred Shares**" means the Class C Preferred Shares of TA Power, the terms of which effectively entitle the holders of such preferred shares to the free cash flow from the Mass Solar solar farm through dividends, based on the pre-tax net earnings generated by the Mass Solar solar farm, and the return of capital.

"**Merchant Facilities**" means those generating facilities that formed part of the Initial Assets and whose power had been sold on a merchant basis prior to August 9, 2013.

"**Merchant Subsidiaries**" means certain subsidiaries of the Company that were Merchant Facilities immediately prior to August 9, 2013, and "**Merchant Subsidiary**" is any one of them.

"**MW**" means megawatt, or 1,000 kW.

"**MWh**" means megawatt hour.

"**NI 52-110**" means National Instrument 52-110 *Audit Committees*.

"**Offset Credit**" means a carbon emission credit in units of tonnes of CO<sub>2</sub>e able to be used as an alternative carbon compliance mechanism to avoid carbon obligation costs from a large emitters GHG regulation. Credits are generated by completing an emission-reduction project pursuant to a regulator approved-quantification methodology to identify the creditable GHG reductions.

"**PPA**" means power purchase agreement.

"**Preferred Shares**" means preferred shares in the capital of the Company, issuable in one or more series.

"**Purchase and Sale Agreement**" means the purchase and sale agreement dated August 9, 2013, between the Company and TransAlta pursuant to which the Company acquired all of the issued and outstanding shares of CHD and Western Sustainable Power.

"**RECs**" means all right, title, interest and benefit in and to any credit, reduction right, offset, allocated pollution right, emission reduction allowance, renewable attribute or other proprietary or contractual right, whether or not tradable, resulting from the actual or assumed displacement or reduction of emissions, or other environmental characteristic, from the production of one MWh of electrical energy from a facility utilizing certified renewable energy technology.

"**Sarnia Plant**" means the 499 MW combined-cycle cogeneration facility in Sarnia, Ontario.

"**SGER**" means the *Specified Gas Emitters Regulation*, a GHG regulatory scheme launched by the Government of Alberta.

"**TA Energy**" means TA Energy Inc., a corporation incorporated pursuant to the federal laws of Canada.

"**TA Power**" means TransAlta Power Ltd., a corporation incorporated pursuant to the federal laws of Canada.

"**TEA**" means TransAlta Energy (Australia) Pty Ltd, an Australian corporation.

"**TEC L.P.**" means TEC Limited Partnership, a limited partnership formed pursuant to the laws of Alberta.

"**TIER**" means the Technology Innovation and Emissions Reduction system, a GHG regulatory scheme launched by the Government of Alberta that replaced CCIR effective January 1, 2020.

"**TransAlta**" means TransAlta Corporation, a corporation incorporated pursuant to the federal laws of Canada.

"**TransAlta PPA**" means the power purchase agreements between TransAlta and the Company providing for the purchase by TransAlta, for a fixed price, of all of the power produced by the Merchant Facilities. The initial price payable in 2013 by TransAlta for output was \$30.00/MWh for wind facilities and \$45.00/MWh for hydro facilities, and these amounts are adjusted annually for changes in the Consumer Price Index.

"**TSX**" means the Toronto Stock Exchange.

"**Western Sustainable Power**" means Western Sustainable Power Inc.

"**WPPI**" means the wind power production incentive of the Canadian federal government to encourage the development of clean power generation projects in Canada.

"**Wyoming Wind Tracking Preferred Shares**" means the Class A Preferred Shares of TA Power, the terms of which effectively entitle the holders of such preferred shares to the free cash flow from the Wyoming wind farm through dividends, based on the pre-tax net earnings generated by the Wyoming wind farm, and the return of capital.